COMPUTER GAMING WORLD

VOL. 3 NO. 4

JULY—AUGUST 1983

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ADVENTURE GAME TIPS

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7 SSI GAMES

GAME RATINGS

KNIGHTS OF THE DESERT™

Introducing SSI's simulation of the North African Campaign of World War II — for your APPLE,® ATARI® and TRS-80.®



KNIGHTS OF THE DESERT. A pretty classy name for a classic wargame.

In the year 1096, knights in shining armor set out on the First Crusade, marching across Asia Minor to reach the Holy City of Jerusalem and free it from the invading Turks.

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SSI

STRATEGIC SIMULATIONS INC

If there are no convenient stores near you, VISA and Mastercard holders can order direct by calling **800-227-1617, ext. 335 (toll free).** In California, call 800-772-3545, ext. 335.

To order by mail, send your check to: Strategic Simulations Inc, 883 Stierlin Road, Bldg. A-200, Mountain View, CA 94043-1983. (California residents, add 6.5% sales tax.)

KNIGHTS OF THE DESERT is available on 48K disk for the Apple® II with Applesoft ROM card; 40K cassette or 40K disk for the Atari® 400/800; and 16K cassette for the TRS-80 Level II, Models I & III. When ordering, please specify computer and format.

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Menu

Vol. 3 No. 4 **Jul.-Aug. - 1983**

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Psalm 9: 1-2

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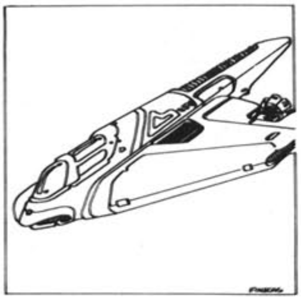
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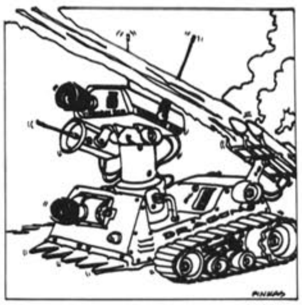
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COSMIC BALANCE SHIPYARD DISK

Contains over 20 ships that competed in the CGW COSMIC BALANCE SHIP DESIGN CONTEST. Included are *Avenger*, the tournament winner; *Blaze*, *Mongoose*, and *MKVP6*, the judge's ships. These ships are ideal for the gamer who cannot find enough competition or wants to study the ship designs of other gamers around the country. SSI's The Cosmic Balance is required to use the shipyard disk. PLEASE SPECIFY APPLE OR ATARI VERSION WHEN ORDERING. $15.00



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CGW's Robotwar Diskette contains the source code for the entrants to the Second Annual CGW Robotwar Tournament (with the exception of NordenB) including the winner, DRAGON. Also included is the winner of the First Annual Tournament, NORDEN+. Twelve robots in all. Muse Software's ROBOTWAR™ required to use tournament disk. $12.00.



CGW BASEBALL DISK

Contains the four teams of the All Star League reported on in 3.3 (AL West All Stars, Al East, NL West, and NL East); the six teams of the 1982 Winter League (see 3.3), the eight teams of the Greatest Baseball Team of All Time Tournament, and a reprint of the results of The GBTOAT tournament from issue 2.3. SSI's Computer Baseball Apple version required to use data disk. Apple version only. $12.00.

Send check or money order to: Computer Gaming World, Disk Order Dept., P.O. Box 4566, Anaheim, CA 92803-4566. California residents please add 6% sales tax. Allow 3-4 weeks for delivery.

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SOLD OUT

1.1 — The Future of Computer Wargaming; Torpedo Fire; Robotwar; B-1 Nuclear Bomber; Crush, Crumble and Chomp!; President Elect; Baseball Tournament; and more.

2.1 — Napoleon's Campaigns 1813 & 1815; The Swordthrust Series; Galaxy; Castle Wolfenstein; Tanktics; Baseball Tournament (Pt. 2); Operation Apocalypse; and more.

2.2 — Southern Command; So You Want to Write a Computer Game; Napoleon's Campaigns Designer's Notes; Blackjack Master; The Current State of Computer Documentation; Robotwar Tournament Winner; Tigers in the Snow; Bug Attack; David's Midnight Magic; and more.

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3.1 — Test Pilot (fiction); Serpentine; Cosmic Balance; S.E.U.I.S.; Armor Assault; The Arcade Machine; The Atari Arena; The Learning Game; INDEX, and more.

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3.3 — Close Assault; Computer Ambush; Adventure Game Contest; Pinball Construction Set; Germany 1985; Galactic Attack; Two Computer Baseball Leagues; Chess 7.0; 100 games rated; and more!

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MICROCON

A computer game mini-convention featuring . . .

• THE STRATEGIC SIMULATIONS INC.

PENTATHLON

(SPONSORED BY SSI)

You could win the first prize of $1000.00 and any three SSI games by playing in SSI'S PENTATHLON. You must choose and play five of the following SSI games against the computer:

- Cytron Masters
- Combat Leader
- The Cosmic Balance
- Galactic Gladiators
- Computer Ambush
- Epidemic
- Knights of the Desert
- The Shattered Alliance
- Fighter Command
- Guadalcanal Campaign

The event is limited to the first fifty entrants, and there will be a $50.00 entry fee. Entrants will also be given, at the conclusion of the event, any two of the ten SSI games featured in the tournament. (That's a value of up to $120.00). There will also be prizes for second and third place.

• THE COSMIC BALANCE TOURNAMENT

(SPONSORED BY SSI)

The Cosmic Balance Tournament, which is limited to 16 players, will pit entrants against one another in four round single elimination matches. Using Scenario One, DEEPSPACE ENCOUNTER, contestants vie for the championship. No entry fee. First place prize will be a $20 certificate and a free SSI game.

• COMPUTER GAME SEMINARS

(SPONSORED BY CGW)

Speakers (alphabetically):

Joel Billings (Strategic Simulations)
Future Releases from SSI

Jack Dott (Avalon Hill)
TACTICAL ARMOR COMMAND

Jon Freeman, Anne Westfall, and Paul Reiche (FreeFall Associates)—designers of ARCHON
Subject to be announced.

Gary Grigsby (Strategic Simulations)
GUADALCANAL CAMPAIGN game system.

Paul Murray (Strategic Simulations)
COSMIC BALANCE I and II.

Russell Sipe (Computer Gaming World)
An Informal History of Computer Gaming

Margot Tommervik (Softline)
What makes a Good Computer Game?

MICROCON is being held as a part of Strategicon's Strategy game convention, GATEWAY 1983.

Preregistration to GATEWAY 1983, which includes all MICROCON events is $13.50 for the three day event. At the door the cost is $15.00.

GATEWAY 1983/MICROCON will take place at the Sheraton-Anaheim Hotel (located next to Disneyland) over the Labor Day Weekend (September 3, 4, 5).

For more information please write to STRATEGICON, dept. MC, P.O. Box 2577, Anaheim, CA, 92804.



INSIDE THE INDUSTRY

by Dana Lombardy

It wasn't too long ago that most of the best-seller lists published in the software industry were dominated by game titles. This situation has dramatically reversed itself recently.

Other types of software-personal finance, filing systems, word processing, etc.—now dominate the best-seller lists. What happened to games?

Several ideas discussed by people in the computer business as the reasons for this change include the following:

1. There are too many games, too many rip-offs, and too many similar-designs. Consumers are more wary now about buying a game sight-unseen, and instead, wait for a review or to play a friend's copy.
2. Games are too expensive. Even though prices are dropping, it's still too expensive to keep collecting game after game when you don't have the time to play all the games you already have.
3. Games got people into computers, but now they want to do more with their computer systems. You'll always find time to play a good computer game, but with so much money invested in your machine, why not have other types of software that can really help you do things besides just kill alien bugs?

While there are other reasons, these three seem to be the main ones suggested for the drop-off in game sales.

That doesn't mean games are dying—in fact, a few "classics" continue to stay on the best-seller lists month after month, joined by a hot new title on occasion. But the day when games made up the majority of best-sellers may be over.

While games may not sell like hotcakes anymore, they're still a very important part of the computer business. But in order to compete, publishers are going to have to offer really different and challenging games at more reasonable prices. And for consumers that can be the *best* news from what may appear to be a negative situation.

So be choosy. You really *do* have influence in what types of games are published. Your vote *does* count—because you vote with your dollars every time you buy (or don't buy) a particular game or other piece of software.

Readers Survey

Here's your chance to give your feedback on the way you buy software now. Please answer the questions below, using the Reader Input Device at the back of this issue.

Part I

Check the *one* answer below of questions 1 throuth 4 that most closely reflects your current attitude about computer games.

1. I buy about the same number of computer games each month—even games I haven't actually seen or played.
2. I buy about the same number of computer games each month, but I'm more selective now and don't usually buy until I see a game.
3. I buy fewer computer games now, but I'll still occasionally buy a game that I haven't seen yet.
4. I buy fewer computer games now, and I'm more selective about which ones I buy.

Part II

If you checked answer #3 or #4 in Part I above, then check the *one* answer below that best describes how you're spending money on software now.

5. I'm spending less money now each month than in the past on software, but almost all of it goes to new games.
6. I'm spending less money now each month than in the past on software, but almost all of it goes to non-game programs.
7. I'm spending less money now each month than in the past on software, but this is equally split between games and other software.

The results of this mini-survey will be published in a future column. Thanks for your participation.

Responses to the readers survey on this page should be made on the RID card at the back of this magazine. See page 51 for instructions.

HOBBY AND INDUSTRY NEWS

A televised **"sin network"** featuring **gambling at home** may provide the impetus for the widespread use of interactive teleshopping services such as videotex and teletext, according to a 314-page report released by International Resource Development Inc., an independent consulting firm based in Norwalk, Connecticut.

"Gambling services may be the answer to get consumers to access teletext and videotex," according to IRD researcher Dave Ledecky. "The average bettor receives his betting information from the newspaper, and then either places a bet at the track, at an off-track betting parlor, or with an illegal bookmaker. The use of teletext and videotex could result in *one-stop gambling*," notes Ledecky. IRD's report notes that off-track betting parlors already use a teletext-like system to display race results, and the Bell Operating Companies with their instant information telephone lines for sports and horse racing results provide a strong indication that consumers do accept the use of telecommunications to retrieve these services and data.

Ledecky notes that with home betting systems, "bets could even be placed on events occuring *within* certain sporting events, rather that just on the outcome of the event. This adds great immediacy to the gambling. For instance, one could place a bet as to whether a particular baseball player is going to get a hit on his next time at bat. Of course,all this would have to be legalized, and that is a distinct possibility within the next few years. People will bet on just about anything,"says Ledecky. "They'll bet on the sunrise as long as it's easy and convenient to do so."

IRD, in another study recently published, stated that and important merger is developing between simulators used for military training purposes and videogames. The study indicates that simulators are beginning to look more like videogames, and videogames are beginning to look more like rudimentary simulators. "Inevitably the two technologies will interconnect," says Ledecky. "Videogames will incorporate simulator principles in order to achieve greater real world likeness, and simulator designers will come to understand the contribution fun makes to training, and add game aspects to simulator training." Indeed, this is already occurring. Perceptronics manufactures a tank gunnery trainer, which the IRD report describes as follows: "It is a table top device with a sight, gunner controls, and scoreboard. Scenes of moving targets in a wide variety of environments are played back under microcomputer control from a laser-optical videodisc and presented in the sight. The gunner positions a reticule on the target and fires, with the number of hits and other aspects of his performance recorded."

According to IRD, there have been discussions within the simulator industry concerning the possible placement of simulators in recreation areas on military bases, thereby transforming (in the minds of the users, at least) the "training" into "entertainment." And, as Ledecky stated half-seriously, "perhaps army recruiters should visit local videogame parlors to find the fighter pilots of tomorrow."

SSI's August releases include: their WWI air game,**EAGLES**, in which players control up to 10 planes per side. It will run on the Apple, Atari, and C-64. **BROADSIDES** is coming along nicely and should be out for the Apple in August with the Atari version coming at a later date. The C-64 and IBM PC versions of **COMPUTER BASEBALL** and the IBM version of **BATTLE FOR NORMANDY** round out the August releases.

First Star Software, Inc. announced today that it will be marketing a number of entertainment and educational programs based on several **Marvel** characters. In its joint venture agreement with the Marvel Entertainment Group (a division of Cadence Industries), First Star will design and market software featuring Marvel's famous super heroes.

Broderbund has announced the release of a new game for the Atari 400/800/1200, new versions of some of their popular games for the Vic 20, and that they were beginning to create versions of their most popular games for the Commodore 64. New for the Atari is **Operation Whirlwind**, which put the player through a series of skirmishes and battle actions which requires that you complete a different set of strategic actions for each one, until the last endgame crescendo.

New releases for the Vic 20 include three conversions; **AE, SKY BLAZER** and**SEAFOX**. All will come in cartridge formats and retail for $39.95.

Broderbund's entry into the Commodore 64 market has been with the conversion of four of their most successful games to this machine. **CHOPLIFTER!, SEAFOX, SERPENTINE,** and **DAVID'S MIDNIGHT MAGIC** have all been released in versions for the C64.

Simulations Canada has announced that it expects to have its first computer games ready for the market by late fall. There two to four titles included in this initial release. Those most likely to be included are Battle of the Atlantic, the Fall of France, 1940, North African Desert campaign, and modern tactical naval combat. The plan is to release them at first for the Apple II, and later to release versions for the Atari, IBM PC, and C64.

Infocom, Inc. will introduce two new games this summer and fall. The first, **PLANETFALL**, is a game that explores the lighthearted side of science fiction by challenging players to save a doomed and plague-stricken planet while trying to keep a straight face. Steven Meretzky, author of PLANETFALL and a long-time contributor to the Infocom game development process, elaborates: "There are several interesting elements that make this game unique. One of the most important is the high level of interaction between the player and a strong second character known as 'Floyd.' "Floyd, an impish robot who is your constant companion in the game, has a well-defined personality. He's exuberant, funny, mischievous, and sometimes unpredictable. The decision to concentrate on this strong second character has allowed us to build rich detail into the personality. In addition, the packaging for PLANETFALL will be mew and different. Inside a folder-like package players will find such physical elements as a Stellar Patrol ID Card, a space diary, futuristic postcards, and other elements that complement the story," adds Meretzky. The game is due out in mid-August and will be on many machines.

The second release, which should appear sometime in mid-September, is **ENCHANTER**. The first in a new trilogy of fantasy games that will take players into a world of magical powers and perilous predicaments. Co-authored by Marc Blank and Dave Lebling, the creative team that designed and and wrote Infocom's popular ZORK underground fantasy series, Enchanter is a journey into an environment where you use skill and logic to overcome "Krill," the evil warlock whose ever-increasing powers have shattered the peace of your world. Blank—who in addition to designing, writing, and programming games is Vice President for Product Development at Infocom—comments, "This game is written in the ZORK tradition, but with new and different settings. In the ZORK trilogy, the emphasis is on treasure and fighting, while in Enchanter the focus is clearly on magic. During your journey, you'll explore an abandoned castle filled with strange and magical trappings. You'll uncover spell scrolls which you must learn to use judiciously in overcoming the many obstacles before you. Ultimately, you'll be able to use magic so effectively that the evil warlock will be banished forever. Another important element in Enchanter is the passing of game time. As the days pass in the story, you'll eat, drink, and sleep or you will reach a point where your powers start to fail."

Corrections to News from last issue: ARCHON was written by Anne Westfall, Jon Freeman, and Paul Reiche. MURDER ON THE ZINDERNEUF was written by Robert Leyland, Paul Reiche, and Jon Freeman.

CHIP & FERB

by Mark Eliot



Taking a peek

In addition to games mentioned elsewhere in this issue, the following products have been received by CGW. Some of these products will receive more detailed attention in future issues. Readers wishing to review any of these games should contact CGW.

Avalon Hill Game Co.
4517 Harford Rd.
Baltimore, MD 21214

PARIS IN DANGER: A multi-level simulation of the 1814 campaign to crush Napoleon. On one level you move army corps around a strategic map of France and surrounding nations. When a battle occurs play switches to a large scrolling tactical map in which the corps are broken down into divisions. A review and analysis will appear in our next issue. Atari 48K.

TAC: TAC (short for Tactical Armor Command) is a game of WWII armored combat. Each side builds a combat team from a roster of British, German, American, or Russian tanks, assault guns and tank destroyers. Although the documentation does not emphasis it, the game supports The Mockingboard sound board (see review in CGW 3.2) which really adds a lot to the game. TAC will be the subject of a feature review in our next issue. Apple.

Avant-Garde Creations
P.O. Box 30160
Eugene, OR 97403

JUMP JET: An arcade type game loosely based on the fiction of the Falklands Island Crisis. You are a jumpjet pilot flying from a Loyal aircraft carrier just off an enemy held island. Your task is first to defend the fleet and secondly to defeat the enemy by retaking the captured island. Various tactics must be used to destroy, in order, enemy cruisers, submarines, kamikaze planes, and rocket lauchers. The game plays a bit like Broderbund's Choplifter. While the graphics are not as good as Choplifter, the game itself has more depth (no pun intended). Apple. $29.95.

Broderbund Software
1938 Fourth St.
San Rafael, CA 94901

LODE RUNNER: This one wins the "keeping the editor up late at night" award for this issue. Well designed (which is normal for Broderbund products). An arcade style game that requires real strategic planning if you are to do well. After the first few attempts you learn quickly than you had better study a game level before hitting the joystick to start your man racing up and down ladders, drilling passageways and solving puzzles. Review coming. Apple II. $34.95.

MATCHBOXES: Remember the TV gameshow CONCENTRATION? Here it is for a computer (well almost). You are presented with a 36 box grid which, similar to the TV game, have symbols behind each "door" that can be paired up so as to gain points and, in all but one variation of the game, reveal parts of the hidden word behind the doors. A great family or party game. Atari. $29.95.

Datasoft Inc.
9421 Winnetka Ave.
Chatsworth, CA 91311

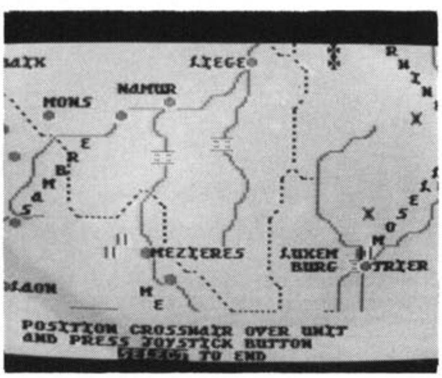
ZAXXON: The official home computer version of Sega's popular coin-op arcade game. Outstanding graphics. Not as detailed as the coin-op version (that is to be expected) but comes close. Atari and Apple.

Dell Publishing Co.
245 E. 45th St.
New York, NY 10017

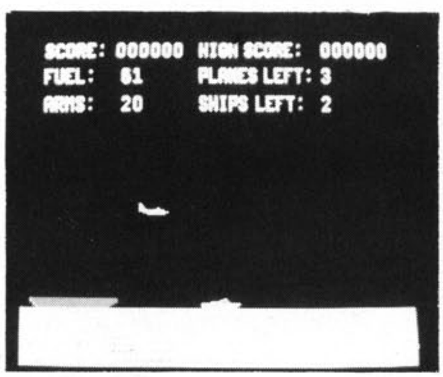
THE OFFICIAL COMPUTER HATER'S HANDBOOK: Written by the author of the Preppy Joke Book and Preppy Cook Book, TOCHH is packed with laughs. Consider what might be found in the section entitled "Computerholics Anonymous—The Hell of "Devil ROM". 192 pages. $3.95.

Home Computer Software
1171 Sonora Court
Sunnyvale, CA 94086

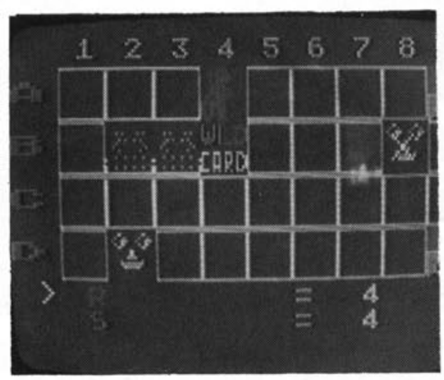
FAMILY BIBLE FUN: A series of disk programs for the Apple and Atari 400/800/1200 that center on Bible knowledge. In the Know Your Bible program you can play games that test your



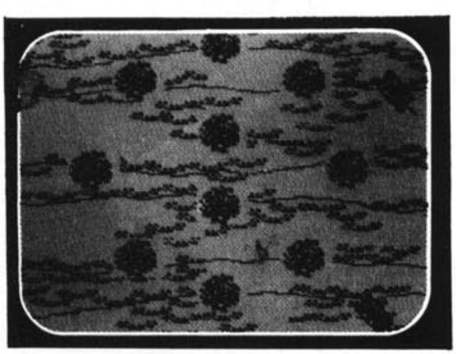
Paris in Danger

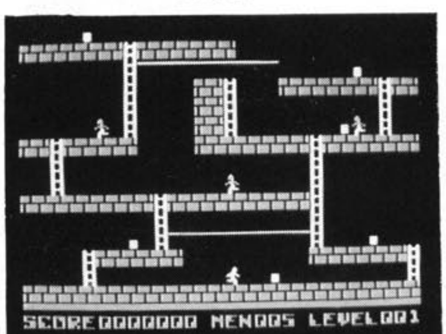


Jump Jet

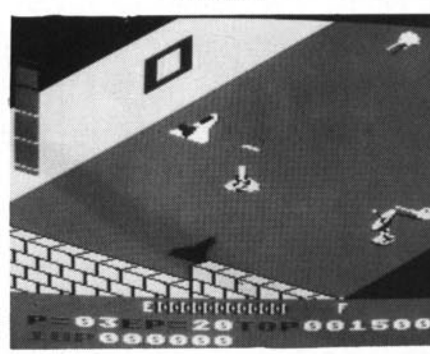


Matchboxes


TAC



Lode Runner


Zaxxon

knowledge of biblical characters, books, etc. Aimed at young people. This is a good looking set of programs for the Christian family that wants to use their Apple or Atari to learn more about the Bible. Master Disk is $19.95. Individual Game disks are $29.95 each. Some of the disks available are Life of Christ, Pt.1 and Pt.2, The Prophets, Great Women of the Bible (11 titles in all).

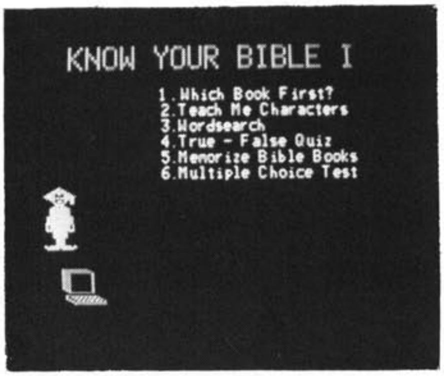
Navic Software
P.O. Box 147270
North Palm Beach, FL 33408

JURY TRIAL: A game for two or more players. The two primary players play the roles of prosecuter and denfense attorney. Other players can be witnesses. The facts of a crime are briefly displayed on the monitor. The witnesses and the two attorneys watch carefully as the information is flashed (in the case of a two player game the lawyers are also the witnesses). Actual game play involves the two lawyers selecting the right questions to ask. The prosecuter wants the truth (i.e. correct answers). The defense wants to coverup truth (i.e. incorrect answers). Thus the game is one of remembering the clues and asking the right questions to get the kind of response (true or false). Although it is not as polished as games from the big companies, JT has potential not only as a party game but as a "strategy" game for two players. Apple. $29.95.

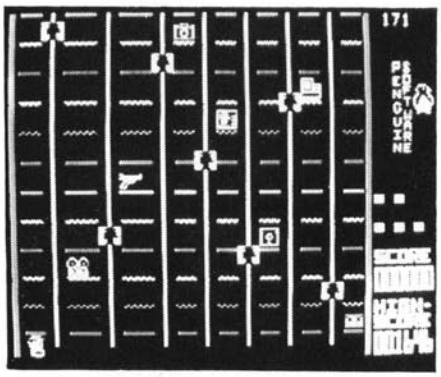
Penguin Software
830 4th Ave.
Geneva, IL 60134

PENSATE: When *Softline* put John Besnard's unpublished PENSATE on the cover of their May-June issue Penguin Software told John that they wanted to publish the game on the basis of the cover feature. Thus we have Pensate. Weird way to find a publisher, John. It is surprising that the game was not published prior to Penguin's interest as it is a good game. The human player(s) must get a single piece from one edge of the board to the opposite edge avoiding the computer pieces. The strategy is to predict far enough ahead to avoid the computer's pieces and any other human player's piece. It is a good game in the classic tradition of chess. Apple. $19.95.

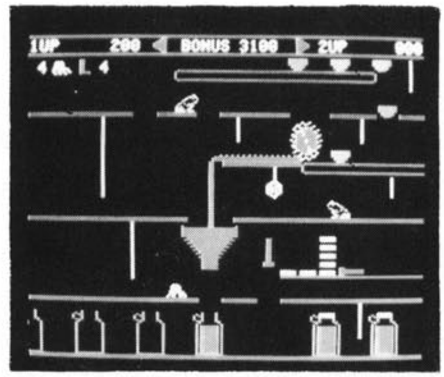
SPY'S DEMISE: Atari version of the original Apple game in which you, the spy, attempt to reach the top floor of the Russian diplomatic mission and capture an encoded message. Play involves crossing each floor while avoiding the guards. Each floor contains parts of the encoded message. When all parts are gathered you can crack the code and send the answer to Penguin. If you are the first person from a state of the USA or Canadian province, or other country to solve the puzzle you can win a Spy's Demise T-shirt from Penguin. $19.95.



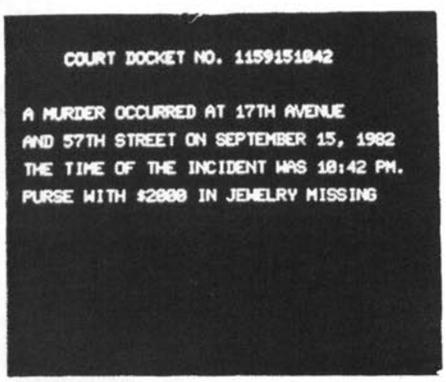
Family Bible Fun



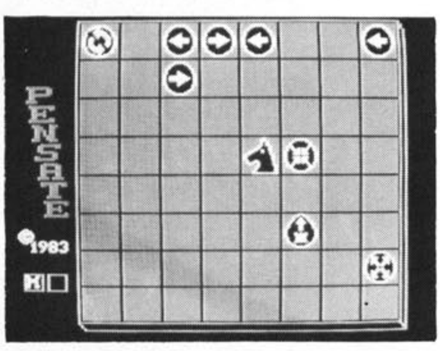
Spy's Demise



Apple Cider Spider



Jury Trial



Pensate

Rainbow Computing
9719 Reseda Blvd.
Northridge, CA 91324

BAT-STAT: Tired of doing baseball statistics for your little league or softball team the hard way? Now, with the help of BAT-STAT, you can use your Apple to do the job more quickly. BAT-STAT is a menu driven program that will keep statistics for a baseball team of up to 20 players. Stats are generated for "this game" and "season" as well as team totals. Most standard catagories are recorded (AB,runs,hits, BA,2B,3B,HR,Sac,BB,RBI). But, for some reason, strikeouts are not included.

Sierra On-Line Inc.
Sierra On-Line Building
Coarsegold, CA 93614

APPLE CIDER SPIDER: Apple arcade game in which you are a spider trying to make it to the attic while avoiding the deadly machinery in the apple cider factory (as well as other hungry critters. A donkey kong type game which supports the Mockingboard sound board.

THE DARK CRYSTAL: Atari version of the original Apple game. TDC is Hi-Res Adventure #6 from Sierra On-Line. The game (designed by Roberta Williams—Time Zone) is based on the epic fantasy film conceived by Jim Henson of the Muppets. The game follows the movie's plot with enough differences to make it a challenge. As Jen, last of the Gelfling, you must find a shard of the Great Crystal and restore it before the Great Conjunction. The excellent documentation includes a four color poster. $39.95.

Soft Images
200 Route 17
Mahwah, NJ 07430

LAMP: Lamp, which is an acrostic meaning Literature Analysis of Microcomputer Publications, is a three part index to articles in American and international microcomputer journals. Indexed by author, subjects, and review catagories, LAMP covers over 150 magazine titles (including Computer Gaming World). Price is $69.50 per year in book form and $54.95 per year in fiche form. Bi-monthly.

Strategic Studies Group
Ground Floor
336 Pitt St. Sydney
2000 Australia

REACH FOR THE STARS: Roger Keating (several SSI designs) has turned his talents to a new area with a game published by a new company. RFTS is a strategic simulation of colonization expansion and conflict in space. Using some of the same game design elements that work well in his wargames, Roger has successfully put together an enjoyable space game. Documentation is well done. Look for review next issue. Apple. $60.00 Australian.

Strategic Simulations
883 Stierlin Rd. Bld. A-200
Mountain View, CA 94043

COSMIC BALANCE II: The long awaited CBII (The Strategic Game) is now available. CBII is the sequel to SSI's popular The Cosmic Balance tactical space warfare game. CBII is an economic/exploration/colonization/conquest game set in the far future. Two players can choose between five scenarios or create their own. Battles can be fought using The Cosmic Balance tactical game or CBII can resolve combat for you. Review coming. Apple and Atari. $39.95.

FIGHTER COMMAND: Another long awaited title from SSI. Charlie Merrow and Jack Avery (Computer Baseball) have teamed up to produce a stunning new game based on the Battle of Britain. The graphics are outstanding. After the German player plans all his raids for the day, the British player does some daily "housekeeping". Then the program goes into execution mode and the game is played with the British player reacting to the German raids. The German player can sit smugly (or nervously) back and watch the British effort to counter his raids. Review coming. Apple. $39.95.

NORTH ATLANTIC '86: Using the Guadalcanal system with improvements NA86 deals with a hypothetical Soviet-NATO confrontation in the near future. Along with the 232-turn campaign game there are two mini games. Review coming. Apple. $59.95.

Swearingen Software
6312 W. Little York #197
Houston, TX 77088

PICK THAT TUNE: Pick That Tune is, as the name implies, a game in which players try to guess popular tunes by listen to bits of each song. There are 16 different game variations which 1 to 10 people can play. Drawing from a base of 100 songs (you choose the catagory—pop,country,children,TV) players bit the number of notes that they think they will need to be able to correctly identify the current tune. An expansion disk with 100 more songs is available. Apple $29.95.

Top Notch Productions
1201 Montana Ave., Suite 5
Santa Monica, CA 90403

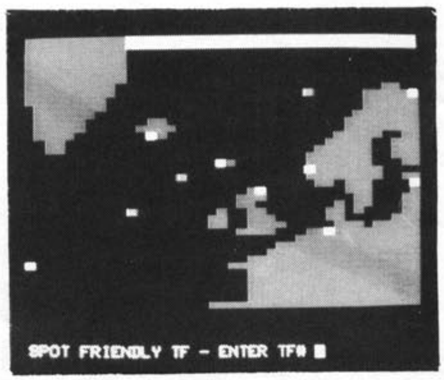
POLLYWOG: A lo-res game in which you are a school of twelve pollywogs trying to grow into adult frogs. Barriers to adulthood are creepies, killer fish, barrier reefs. The ultimate goal is to keep any blue pollywogs alive so that he may grow up to be a prince. While the graphics are lo-res, the color and very nicely done sound make this game rather artistic. There are 64 levels of play. Apple. $29.95.



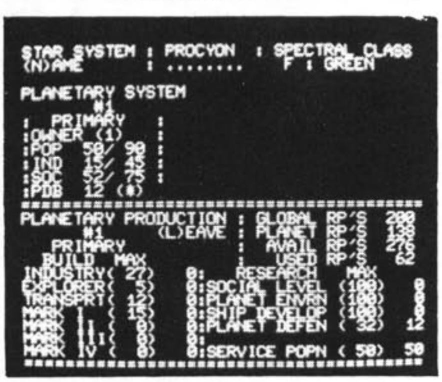
The Dark Crystal



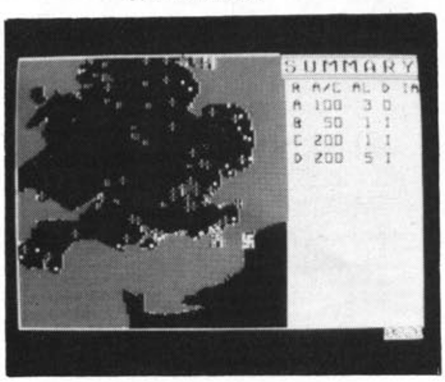
Cosmic Balance II



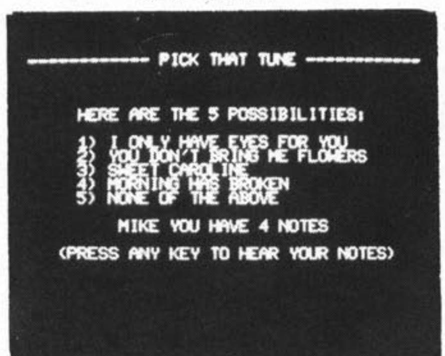
North Atlantic '86



Reach for the Stars



Fighter Command



Pick That Tune

Commercial Data Systems Ltd.
730 Eastview Ave.
Regina, Sask. Canada S4N 0A2

BUGSPREE: Bugspree is a Centipede clone. The game involves firing an automatic cannon against an invasion of bugs, mushrooms and spiders. The game makes excellent use of the Vic 20 graphics and sound capabilities, but advances very little over the original arcade game. $29.95, Vic 20.

ROAD TOAD: RT is a familiar looking version of the Frogger variety. The graphics utilize a very fluid animation and the sound is nice. $29.95, Vic 20.

WITCH WAY: WW is a new interpretation of Donkey Kong. The game includes nine floor levels and four screen patterns. Each screen pattern offers a new objective and challenge. The use of a timer and bonus points also adds to the challenge. $29.95, Vic 20 with 8K expander.

Human Engineered Software
71 Park Lane
Brisbane, California 94005

GRIDRUNNER: This game begins with the look and feel of Centipede. It is a faster and more challenging game, however. The patterned Y zapper with its destructive plasma beam is more difficult to avoid than the spider in Centipede. Memorizing the patterns of the Y zapper and alien bombs will enable the player to maneuver his ship more effectively and attain higher scores. The sound effects for this game are excellent. $39.95 Vic 20.

SHAMUS: This is the licensed version of Synapse Software's well-known game. It is a fast moving game with excellent graphics and smooth animation. For a detailed description of the game, see CGW 2.6, p. 20. The simplest description of the game would be that it seems a cross between Bezerk and an adventure game. The player is an interplanetary detective attempting to overcome Robo-Droids and Snap-Jumpers in order to find the dreaded Shadow and terminate him. $39.95, Vic 20.

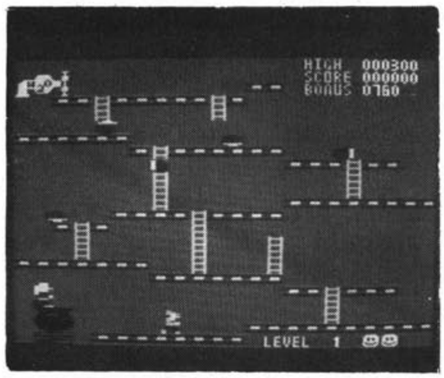
Sierra On-Line Inc.
Sierra On-Line Building
Coarsegold, California 93614

FLIP-N-MATCH: FNM is a Concentration-type game. It contains both a two-player and solitaire version for adults and a two-player and solitaire version for children. The adult version has more possible matches than the standard Concentration game board and the shapes are similar enough that one must pay close attention in order to do his/her best. The solitaire version is relatively easy at skill level 0, but has five other levels to challenge the player as he/she improves. Vic-20.

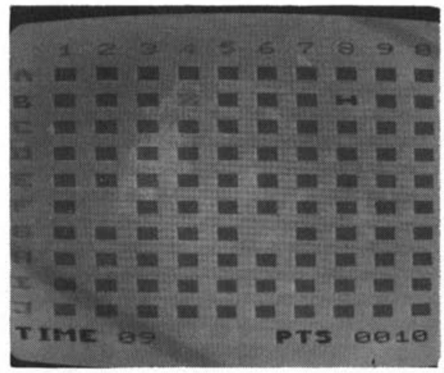
ULTIMA: ESCAPE FROM MT. DRASH: ULTIMA is an intriguing adventure game because of its unique graphics and marvelous musical score (The Well-Tempered Commodore?). The screen offers three different views. The left-hand corner of the screen offers a three dimensional maze, the right-hand corner of the screen offers an overhead view of the maze, and the lower portion of the screen offers a tactical combat view. Each adventurer starts with three spells and a weapon and tries to make his way out of the dungeon of Mt. Drash. There are 15 levels to the mountain dungeon and the difficulty factor escalates rapidly. Vic 20 with 8K expander.

The Code Works
P.O. Box 550
Goleta, California 93116

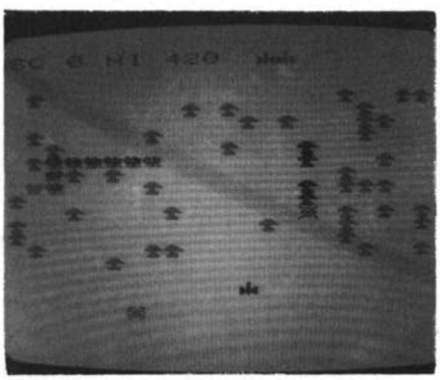
VIXEL: This is a cassette magazine with three ready-to-run programs in each issue. Volume One contains two arcade games (FIRE and RACE) and an electronic sketchpad (DRAW). FIRE is an arcade game where the player operates a helicopter with water bombs and attempts to successfully put out a fire in a high-rise building before the time is up. RACE is a game where the player races with the computer's car. DRAW is a computerized "Etch-A-Sketch" with the ability for you to save your drawings to tape. $12.95, Vic 20.

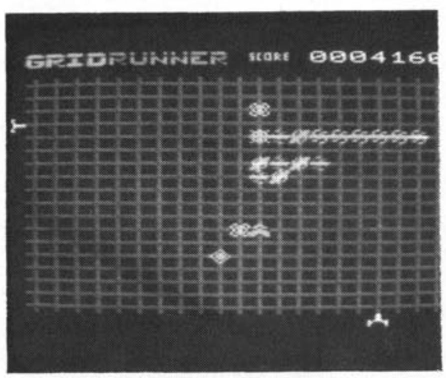


Witch Way

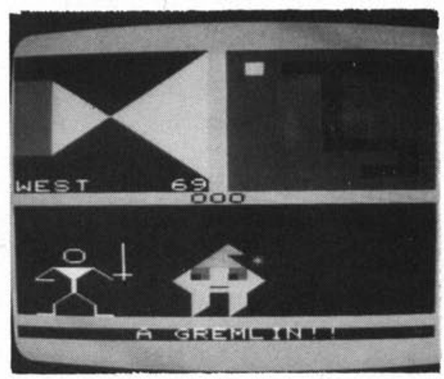


Flip-N-Match

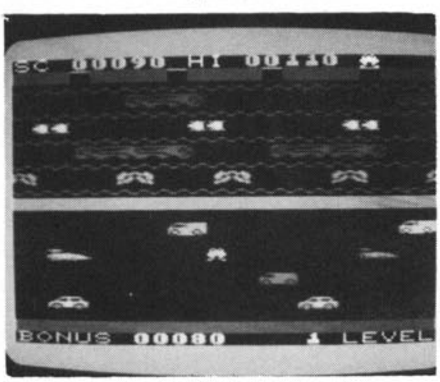

Bugspree



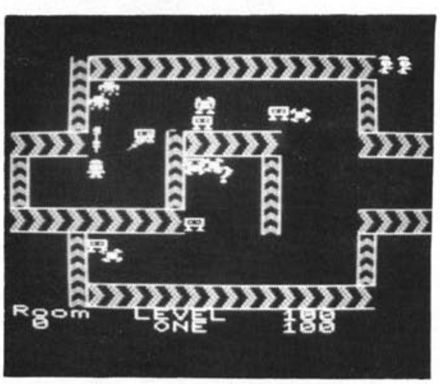
Gridrunner



Ultima: Escape From Mt. Drash



Road Toad



Shamus



Vixel

SUSPENDED: Review

David P. Stone

BASIC INFORMATION

NAME:	**Suspended**
TYPE:	**Adventure**
SYSTEM:	**Many (Atari reviewed)**
FORMAT:	**Disk**
# PLAYERS:	**One**
AUTHOR:	**Michael Berlyn**
PRICE:	**$39.95**
PUBLISHER:	**Infocom Cambridge, MA**

Suspended is the latest in an unbroken chain of outstanding adventures from Infocom. It's premise is ingenious and intriguing.

In a cryogenic state, deep within the bowels of the planet Contra, your sleeping mind monitors the filtering computers that maintain a balance of the planet's food, transportation, and weather systems. Contra's population depends on these systems. Your conscious mind is the failsafe system. You are to be awakened only if there is an emergency. There is, of course, an emergency.

After awakening your task is to direct the actions of six robots to repair and reset the filtering computers so you can get back to sleep. Sound like fun? Get ready for some long and sleepless nights because if you don't fix them in a hurry, humans from the surface will show up with your replacement clone to pull your plug. The result: high tech death.

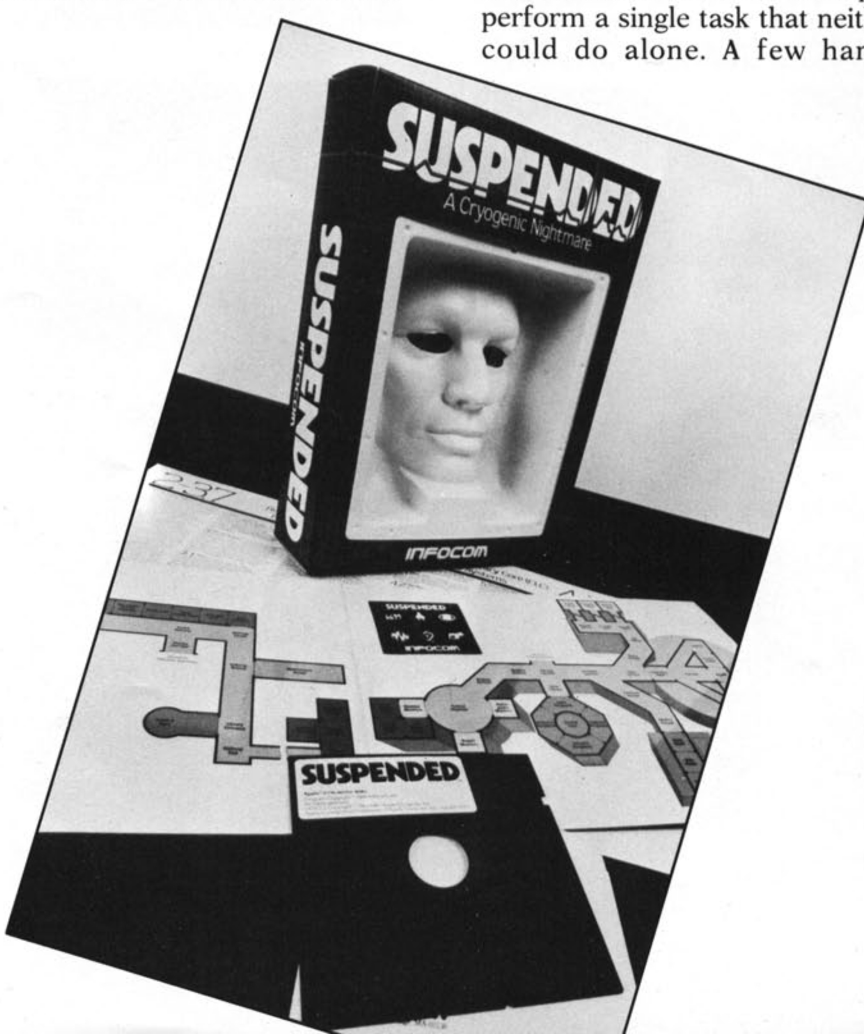
Each robot has a name, a set of special skills, and its own personality. The personalities seem to grow on you. As the game progresses, the robots turn from talented pawns into trusty friends.

Each robot has a primary skill plus some degree of mobility and grasping extensions. IRIS sees (when she's working). WALDO manipulates objects and moves by sonar. SENSA senses. She can detect vibrations, photon emissions, and ionic discharges. AUDA hears. She's particularly good at eaves-dropping. WHIZ is the brains of the outfit. He's your link to the complex's computer memory banks. Finally, there's POET. He speaks in cryptic clauses that accurately describe his environment — if you can just figure out what he's referring to. Also, he has a special diagnostic sensor that works when you direct him to touch something. All in all, they are quite a crew (with only a hint of sexism in their roles).

Both cryogenics and robots are enjoying a certain popularity nowadays, so the themes of Suspended are well timed. Of course, the idea of robots has been around for a long time. Ones with personalities were first rocketed to popularity in Isaac Asimov's science fiction classic *I, Robot*. That work tapped, and perhaps exploited, man's fear of technology and his ultimate inability to control his destiny.

The robots in Suspended are not from the same world as Asimov's, but they are not from the other side of the universe either. They serve you faithfully within their limitations and have no delusion of power or superiority. However, throughout the adventure you are very much aware that you have no hands but their hands ("extensions"), no senses but their senses. You may find this frustrating when you want a robot with "dainty extensions" to grasp, or a robot with no visual scanner to see.

You can talk to the robots individually or as a group. You can even have two of them team up to perform a single task that neither could do alone. A few handy



abbreviated commands are available: ARL (all robots, report your locations) and ARR (all robots, report). These two commands are especially useful when you are still exploring and have temporarily lost track of which robot is where. Another feature that makes this game a cut above other adventure games is you don't have to type in every move. For example, you can send a robot from one side of the complex to the other by simply telling him to go there. Meanwhile, you can have other robots perform other tasks. Another time/typing saver is the "FOLLOW" command; just tell one robot to FOLLOW another one and he will do so as long as it is physically possible. These two features help make the game very playable.

There are several phases to learning and enjoying Suspended. First, there's exploring and testing to discover all the individual maneuvers necessary to fix the filtering computers and complete the game. Next, there's putting all the pieces together to make sure they fit. Then comes the honing process —developing the critical path that minimizes your total number of moves.

Having fixed the filtering computers in the least number of moves that you believe to be possible, the adventure is still not over. No need to file Suspended on the shelf with all those other dusty adventures. You are now ready for the next phases: playing the *advanced, harder,* and *expert* levels. Things happen quicker on these levels, but the basic scenario is the same. One level beyond all these is *impossible.* It is just that.

If you've experienced *Zork, Deadline,* or *Starcross,* you already know about the quality of Infocom's parser (the part of the game's program that interprets your input and responds accordingly). It's the best on the market. The program accepts complete, complex sentences, not just two-word input. As with earlier Infocom adventures, Suspended recognizes over 600 words; and, more importantly, it responds intelligently to most user input. So, there is seldom a need to test combinations of verbs and subjects to hit upon the exact words that the game designer had in mind.

As everyone who has read their ads knows, Infocom doesn't do graphics. Instead, their parser and their prose tell the story. However, the quality of the prose in Suspended is different than in other Infocom games. The prose in Suspended is mostly reports and replies from the robots. While there is little purple (in the prose), each robot has a particular way of saying things that contributes to establishing its character, revealing its personality, and developing an enjoyable atmosphere for the game.

True to form, Infocom has maintained their tradition of producing the high quality documentation. The game includes a plastic molded mask of a cryogenic sleeper — sure to spook small children and entertain all others (and, by the way, of no use in completing the game); a full-color, two-fold map board of the underground complex with six vinyl markers — one for each robot; and, a well written instruction booklet. Besides containing necessary background information and procedures for playing the game, the booklet is cleverly written, slightly wordy, and filled with wry understatements about your cryogenic predicament. As a total package, the documentation for Suspended leaves no gaps and does more than enough to establish the mood for the game.

One task of the adventure writer is to provide just enough clues, in the instruction booklet and in the game itself, for you to be able to figure things out. Too many clues and the answers are given away. "Hint" systems allow the writer to be skimpier with the clues since they allow you to move forward even if you do get stuck. Suspended incorporates one of the cleverest hint systems you are likely to see. It is totally integrated into the story line.

Hints are dispensed via the underground complex's Central Library Core (CLC). The CLC is a master computer that has three areas from which WHIZ can access historical, technical, or advisory information about objects that the robots find. A fourth area of the CLC provides an index to the other three. So, for example, after telling WHIZ to plug in at the Index, you can command him to ask about an object (e.g., "WHIZ, ASK ABOUT PANEL.") If information on a "panel" is available, the Index will list which of the other three areas contain the information so you can send WHIZ there to access it.

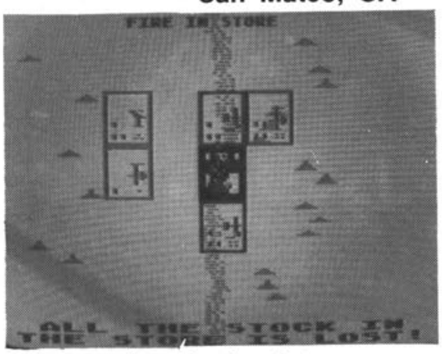
Continued on p.46



M.U.L.E.

Edward Curtis

SYSTEM: Atari 800
FORMAT: Disk
#PLAYERS: 1 to 4
PRICE: $40.00
DESIGNER: Ozark Softscape
PUBLISHER: Electronic Arts
San Mateo, CA



Some time in the future, on a planet far far away, four beings are left to develop the planet with only the so-called help of temperamental M.U.L.E.s (*Multiple Use Labor Elements*). An interactive game for four players (the computer being able to play up to three of them), M.U.L.E. is a thoughtfully designed and quick playing game which contains the finer aspects of an oil exploration game, an auction game, a real estate game and bits of others which, as stated on the inside of the jacket, "...died so that M.U.L.E. might live." A design of Ozark Softscape (Dan Bunten, Bill Bunten, Jim Rushing, and Alan Watson), this is a game which pits you not only against each other, but the colony as a whole is also judged at the end of game for overall success.

A definite bonus with M.U.L.E. is it's packaging (as it is also with the other products recently released) by Electronic Arts. The jacket, beyond the humor that it uses, is well executed in both artistic design and in the information that it contains.

The M.U.L.E. *Player's Guide* is another example of a well designed adjunct to the actual program. Each of the three levels of play (Beginner, Standard, and Tournament) are given their own section of the guide which includes the basic rules or additional rules for that level and *tips* which can help quite a bit. The guide also includes a page of answers to the most common questions asked by the beginning players, the two basic laws of production for the basic commodities used in the game, and the strategies and opinions of the infamous "gang of four"(Dan Bunten, et al.).

As suggested in the Player's Guide, the novice player should jump directly into playing the Beginner level game after only a cursory reading of the rules. The game itself is its own best tutor. When, after a game or two, a player wants to know just what he has been doing, the guide is still there to be read and now he can hopefully appreciate its explanations.

Each turn is made up of several sections during which different things must be accomplished. The first part of each turn is the "Land Grant" phase. Each player is given the opportunity to select one plot of land from the five by nine grid which makes up the colony. The players choose their land based upon what they what to produce and where their other land is located (as these factors will effect the plots production).

The player will then, in the development phase, decide which of the commodities is best to develop in regards to the previous turns supply and perhaps his personal shortage. On his part of this phase, the player goes to the town corral (the town is located in the center of the map), buys a M.U.L.E., and outfits it to produce which ever commodity is desired. The player then leads the temperamental creature to his newly aquired plot and sets him up for production by centering himself over the hut which appears in each undeveloped plot of land. This phase is ended either by the player's time running out or by his getting back to the town and entering the pub (which will gain him an amount of money from gambling based upon the amount of time which he has left).

After the last player has developed any land that he has had time to develop, the established M.U.L.E.s produce the commodity for which they were outfitted. All production completed, the game then goes to the "auction phase". It is during this phase that any player with an excess in any given commodity has the opportunity to sell his excess to either a player with a shortage, or to the town store. The price received depends upon the supply and the last price paid for the given commodity. The turn ends with a display which shows each player's relative worth and the value of the colony as a whole.

The Beginner's level of play introduces the player to the three basic commodities produced on

Irata (the planet on which all of this is taking place) and the basic economic rules which determine the level of their production. Each of the commodities (*Food, Energy,* and *Smithore*) has a definite use in developing the colony and each player's land. The players also learn that the production of the commodities varies due to the type of land on which it is being produced. Food, which is needed to give the player a full time allotment with which to develop his plots of land (each player gets one lot per turn), grows best in the river valley which runs down the center of the map. Energy, which is needed for production of the other two commodities, is best produced in the flatlands. And Smithore, which is needed for the continued production of M.U.L.E.s, is produced best in the mountains.

There are two "Laws of Economics" which, as mentioned above, rule the degree of production on a player's land. The first, *Economies of Scale*, states that the larger an operation is, the more efficient it is in producing a given commodity. You will, therefore, gain one extra unit of production on each plot of land which is adjacent to another of your lots which is producing the same thing. If, for example, two of your adjacent lots were both producing energy and both had base production of three units per turn, then their actual production, due to the Economies of Scale, would be four units per turn.

The other "Law" is the *Learning Curve Theory of Production*. This theory states that every time you double the number of units that you have ever produced, your production costs go down 20% due to improvements in production methods. In M.U.L.E. this is translated into your getting one extra unit of production on each plot for every three plots producing a specific commodity,. no matter where it is located. Using the last example, if that player were to add one more plot of land anywhere on the map, each plot would have their production increased by one. And, unlike the Economies of Scale which can only increase a plot's production by one, the Learning Theory of Production will increase your production by one for *every* three plots producing the same thing.

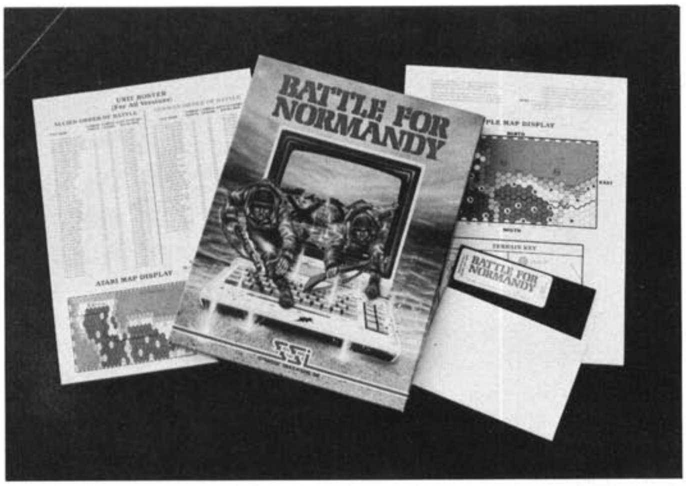
The *Standard Game* introduces the players to two new features which can have dramatic effects on the outcome of the game. Land is the key to the changes in the Standard Game. Immediately after the Land Grant phase, there is a chance that the colony authorities will auction off up to six extra plots of land (on the average, only one lot is auctioned). Getting extra lots early in the game can mean a jump on getting production bonuses that will put you into an early lead and, in turn, make you that much better off when other lots are auctioned off. The other change in land rules is in the ability to sell land that is not needed (to get money for other more useful land) or just to get money with which to feed yourself. The buying of land in both the town organized sales and in the player sales are handled in the same auction format as is the trading of commodities in the auction section of the game. The only difference between the two types of land auctions is that the seller has the right to refuse to sell at any time up to the close of the auction if he is not satisfied with any aspect of the sale.

It is during the *Tournament Game* that the final commodity is introduced into the game. *Crystite*, the fourth commodity, is distributed without regard to terrain, with the exception that it can not be mined in the river valley. It is also the only commodity whose price is not dependent upon supply and demand, as all of it is shipped off planet and has no local use (the price of crystite randomly varies within set parameters). As the relative worth of a plot of land for Crystite production can not be known from land features, a new office is opened in the town: the assay office. Players can check the base production of any plot of land by taking a sample of soil to the assay office for a report (which, of course, uses up some of the players precious time).

The last thing added in the Tournament Game is the powerful ability for players to *Collude*. During any auction, two players may choose to collude in order to sell to one another while preventing another player from getting a needed commodity. Collusion also works during private land auctions by allowing only a chosen player to bid for the land in question.

While these descriptions of M.U.L.E. have been far from complete, they do capture the basics of a game which has very few aspects which one might wish to alter. The first point which came to question was the lack of a "save game" option. While even the Tournament Game is only twelve turns long and takes less than two hours, it is still aggravating to have to kill an almost completed game for lack of time. It would also have been an improvement if the robot players could have been a bit brighter. They become rather predictable after a time and it becomes relatively easy to take advantage of them. The greatest complaint that could be found in a game which is so enjoyable is that it is just *too short*. To increase the length of the game and keep its dynamics of play would, unfortunately, necessitate a major revision and expansion of the game. It is a task which we will just have to wait for with great expectations.

M.U.L.E. is a fascinating and very enjoyable game which comes to its best point with four human players. The interaction and demands on creating a development strategy which can not only change from game to game, but from turn to turn, makes this a game which will continue to be played long after others are put aside to collect dust. ▣



Battle For Normandy: Strategy and Tactics

Jay Selover

TYPE:	**Wargame**
SYSTEM:	**Apple, Atari 400/800,TRS-80**
FORMAT:	**Disk or Tape**
#PLAYERS:	**1 or 2**
PRICE:	**$39.95**
PUBLISHER:	**Strategic Simulations Mountain View, CA**

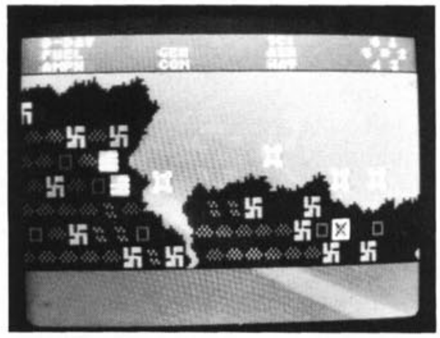
Battle For Normandy (BFN) is SSI's simulation of D-Day and the build-up of the Allied beachhead in Normandy. While it is a thoroughly enjoyable game and provides nail-biting suspense, it falls a notch short as a historical simulation. The game recreates the period from June 6 to June 28, 1944 in two-day turns, with units representing brigades, regiments, or divisions. The map covers Normandy from about Coutances (in the southwest), to Cherbourg (in the northwest), to Cabourg (in the east). Victory points are accumulated throughout the game for eliminating enemy combat points (with a bonus when a unit is destroyed). Also, the Allies gain victory points for units which penetrate inland while the Germans receive points for units which are able to hang on near the beaches. Allied units can acquire further points each turn by occupying (with no Germans adjacent) the three major cities of Cherbourg, Caen, and St. Lo (significant bonuses are awarded for possesion of these cities at the end of the game).

The strong points of the game as a simulation are the realistic, attritional approach to combat in Normandy and the emphasis on the limitations of supply and cross-Channel transport. As a game, BFN gets gold stars for ease of play, speed of execution, play balance, number of game options, and a generally competant solitaire play (at least against conventional Allied attacks).

Strategy

The weakest points in the BFN design are best exposed in discussing optimal Allied strategy. Historically, the main Allied objectives during the first 22 days of the Normandy campaign were threefold. First, to establish a secure landing zone by linking all five landing beaches as quickly as possible. Second, to capture the vital port of Cherbourg by first cutting across the Cotentin peninsula from Utah beach to isolate the city and then to drive north. Third, to capture Caen, an important rail hub just southeast of the British beaches (there is still some question whether the importance of Caen was not more to distract German armored reserves away from the Cotentin peninsula and the defense of Cherbourg). Significantly, this is precisely the order in which these objectives were accomplished; the five landing beaches were linked by June 11, Cherbourg was taken on June 27, and Caen was not wrested from the Germans until about July 21.

In playing BFN, the objective of linking the beaches can be all but ignored. The British beaches are so close together that the initial



landings will consolidate them, and Omaha beach is easily linked-up by the elimination of one German regiment by Turn Three. Utah beach, though, can stand as an island through most of the game. The area between Utah and Omaha beaches is important only in so far as the coastal belt should be cleared of Germans as quickly as possible, but I have often failed to link the two American beaches until June 26 (the next to last turn) and still won the game. So much for the most important historical objective!

The capture of Cherbourg also receives significantly non-historical treatment. It is time consuming, wasteful of units, and ultimately foolish to attempt the historical maneuver of driving east from Utah beach to cut off the city before assaulting it. Rather than drive due east through bocage against strong German units (bocage multiplies defense factors by 2.5 in combat), it is much more efficient to head north along the eastern side of the peninsula and then west across the northern shore to Cherbourg. This skirts most of the bocage and

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A New Column...



As told by Scorpia

Ah, I see you made it! That's right, just step inside and close the door; it's pretty chilly out there. No, nothing I can do about that; outside, it's always foggy November twilight. Comes with the territory, you might say. But we have a remedy for that: pull a chair up to the crackling fire, and I'll have Fred pour out a tall one for you (don't worry about Fred; he's only half-grue and really quite civilized). Err...no, we don't carry Diet Pepsi, you'll have to settle for something else. How about some dwarvish beer, straight from those little old brewers in Colossal Cave?

Good! I'm sure you'll enjoy it! Now that you're all settled in, tell me about your plans. What adventure did you have in mind? Ah, heading off for Tibet and the *Serpent's Star*, eh? I've made that little expedition myself, and I'll be glad to give you some advice about it.

SERPENT'S STAR

First, you'll find it helpful to know a little about Buddhism. There are some riddles in the game that are based on a knowledge of that religion, and if you aren't familiar with some of the concepts, you will have a very tough time indeed! Also, keep in mind that not everything in this game is of significance or has a bearing on winning. For example, you can bypass the first monastery entirely and still complete this adventure. Whether or not the game was designed that way is a mystery, but the fact remains that you needn't visit the Yerpa monastery. Because of this, you will find it isn't necessary to buy everything the merchant has for sale. In fact, besides the very obvious horse, you need only purchase three items. Just be logical in your choices; there are no hidden traps here.

What to do at the inn should be apparent; you certainly have enough money. Only one of the men is really important; if the one you're talking to doesn't soon produce something of value, go to the other man. Then just sack out for the night. The wolf is another problem. You have two choices here: kill it or go around it. He *can* be killed, but the timing is important, so it's best to save the game before leaving the inn: you may not manage it the first time (mean, those wolves!). Going around the wolf requires some careful mapping, but will save you the frustrations involved in trying to kill it.

The monk on the mountain road is also important; he has something you need, so take your time here and don't move on until you get the item from him. You won't get a second chance: if you leave and come back, he'll be gone. So, check your inventory carefully, and consider what he might want. You will also have to say the right thing, and that might be a bit tricky. However, there aren't too many topics you'd want to talk about, so it shouldn't take too long to come up with the proper phrase.

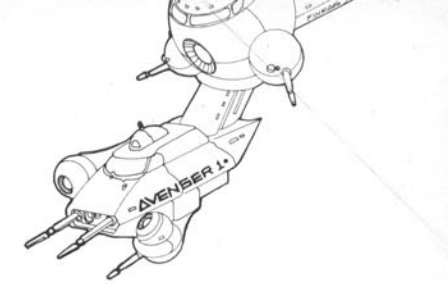
Ah yes, the avalanche! Well, I'm afraid there's no way around this time; you'll just have to dash past it. It takes good timing and VERY careful observance to get through, but you can do it. However, since it might take you more than one try, it's a good idea to save the game before leaving the ice cave.

Now, at last, you've made it to the fabled monastery that holds the Serpent's Star! You just have to find it, and that won't be easy. The first thing to do is search all rooms THOROUGHLY! Read descriptions carefully, and act accordingly. One thing you can ignore is the armor; you're too big to wear it and it isn't useful for anything, anyway. Also: there is a little trap in one of the rooms, so be careful what you open up!

Once you've been everywhere else, you should be ready to tackle the silver door. Of course, you must get rid of the guardian demons first, but if you have visited all the rooms, you know what to do here (if not, go back and try the rooms again until something happens). Once you've taken care of the demons, you will be able to open the silver door. At this point, you should have four gems. If you don't, I suggest you search around carefully for the missing one...you will certainly need it later on! Now, just make your way through the rooms, past the exercise yard, and into the building with the old monk. Now here's where it starts to get mean. The monk will ask you three questions, and you had better know the answers the first time. This is when a familiarity with Buddhism will help (but if you're really stuck and the library is closed, the answers to all riddles are included at the end of the column).

Once past the monk, you will find yourself in the bane of every adventure game, *the maze*. You will have to map this one extremely carefully, as you can become con-

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COSMIC BALANCE SHIP DESIGN CONTEST RESULTS

Twenty-five entries fought it out in the CGW Cosmic Balance Ship Design Tournament. When all the phasers were silenced, all the plasma torpedoes spent, and all the fighter squadrons destroyed, **David Cheng** of San Clemente, CA was the hands-down winner. David's tech-6 dreadnought, *Avenger,* was the only ship that had a positive composite score. He averaged +143 points against the three judges. The next closest design was *Baldur* by Michael C. Powell of Baltimore, MD who had a composite score against the judges of -16. From there the scores went from -27 to -250.

Avenger was, according to the judges, a "good combat ship for close in fighting". It's score against Paul Murray's *Mongoose* was +156. It's score against Keith Brors' *MKVP6* was +24. And against Russell Sipe's *Blaze, Avenger* scored +250 (Blaze was blown out of space). As Russell is the publisher of CGW, David's subscription was immediately canceled (just kidding David!). Paul Murray is the designer of both The Cosmic Balance and Cosmic Balance II. Keith Brors did game development on Cosmic Balance II.

Avenger's design concentrated on forward firing weapons and speed. The ship would accelerate at high speed towards a target while firing forward, and constantly keeping it's nose pointed at the enemy. The forward shields were of maximum strength. This, combined with an armor rating of 50, made the ship ideally suited for straight forward infighting.

Nearly all entries were composed of a single tech-6 dreadnought. A few entries chose a lower tech level so as to have two dreadnoughts and still remain within the tournament guidelines. The entries can be classified into one of three types of ships: transporters; battleships; motherships (i.e. aircraft carriers).

Transporter ships had large numbers of marines on board that would beam through a downed shield and board an enemy ship. These ships had the potential of scoring well, as captured ships counted for double victory points. The highest finishing transporter ship was Michael Livanos' *Ajax.6* which gathered +16 and 0 from Paul and Keith's ships (both were battleship types), but fell to Russ' fighters (from his aircraft carrier BLAZE) due to weak rear shielding (those little fighters fly around like a pack of wasps). His score was good enough for seventh place.

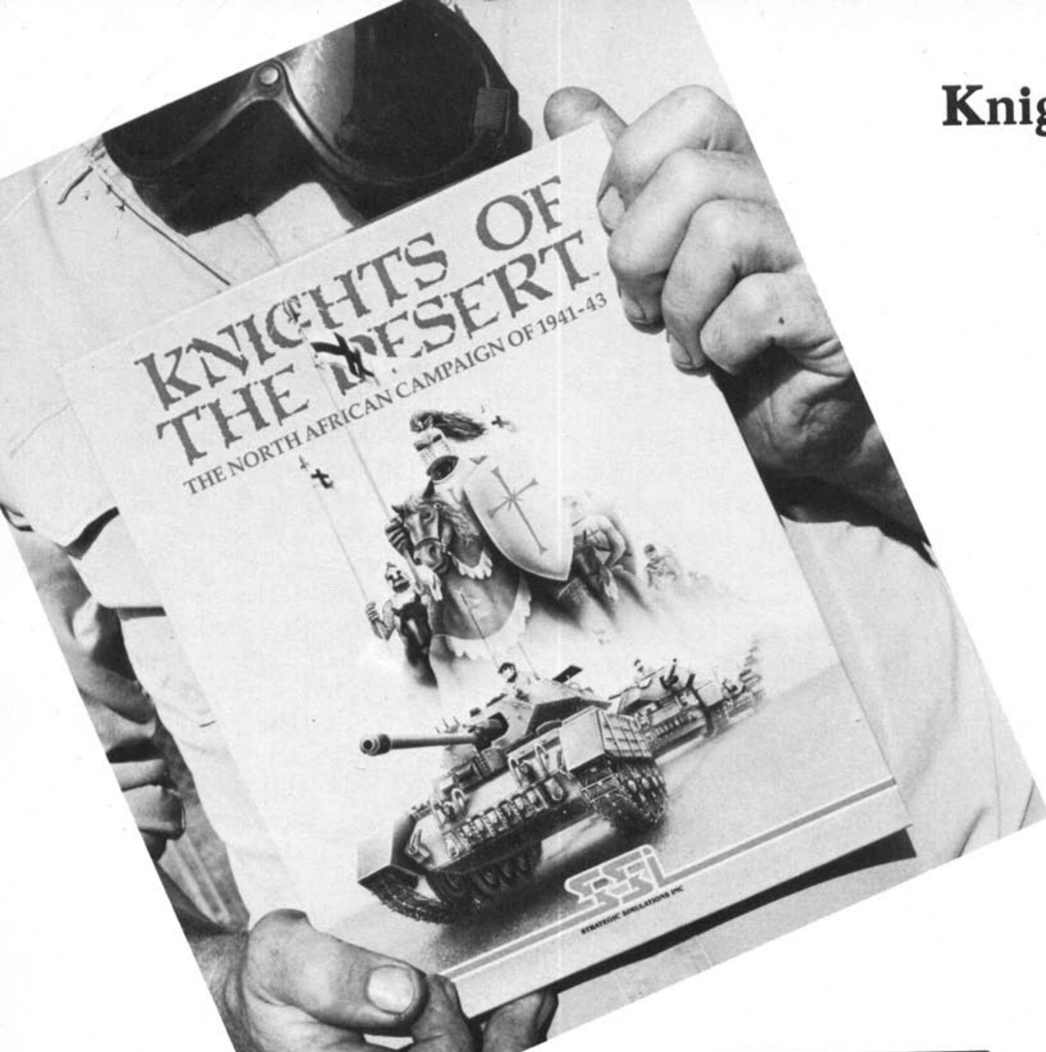
Battleships, which were the most common design, concentrated on direct fire weapons such as phasers and photon torpedoes. They were designed to close-in or to circle an enemy pummeling him with (hopefully) withering fire. *Avenger,* our tournament winner was of this type.

Motherships, are very similar in nature to WWII aircraft carriers, with the majority of space in the ship dedicated to fighter bays. This design can be murder on any ship with less than a 25 shield strength in any arc. James Reisman of Southampton, NY used TWO motherships *Aegean and Bosporus* as his entry and placed third. James was able to have two motherships by reducing his tech to level one. This made the ships weaker individually but allowed him to launch six fighter groups (as opposed to the maximum of four in a single ship design of tech level six).

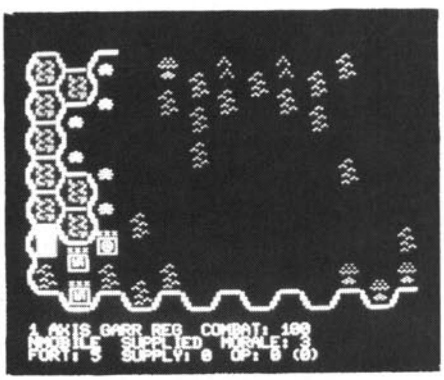
Congratulations to David Cheng and *Avenger,* winner of CGW's COSMIC BALANCE SHIP DESIGN CONTEST. David will receive an SSI game of his choice. Our thanks to all the entrants. If you would like to get the ships in our contest, including *Avenger* and the three judges ships, see the announcement of CGW's COSMIC BALANCE SHIP DISK in this issue.

Knights of the Desert: Review

John Gleason and Ed Curtis



NAME:	**Knights of the Desert**
TYPE:	**Wargame**
SYSTEM:	**Apple, Atari, TRS-80**
FORMAT:	**Diskette or Tape**
#PLAYERS:	**1 or 2**
AUTHOR:	**Tactical Design Group**
PRICE:	**$39.95**
PUBLISHER:	**SSI**



Historical Overview

From the beginning of the North African campaign in 1940, Lieutenant General Richard N. O'Connor and Theater Commander Sir Archibald Wavell had performed brilliantly in all but destroying a numerically superior Italian force. By February 1941, all that was left of the Italian Army in North Africa, originally of 250,000+ men, were a few badly demoralized divisions near Tripoli.

The final blow, however, was spared the Italians due to an order from Winston Churchill, which detached the cream of O'Connor's forces for the ill-fated defence of Greece. This decision was made not knowing that on 12 February, the day before the announced transfer decision, Erwin Rommel and the first units of what was to become the Afrika Korps had landed in Tripoli.

The Game

Knights of the Desert(KD) is a multi-scenario simulation of the fight for the section of desert between El Agheila and Alexandria. This area, unremarkable in its own right, served as the battle ground on which one of the most able of the German armor commanders and a series of less able British commanders were to wage a see-saw campaign for North Africa, and ultimately the entire Mediterranean Theater. The critical features of this campaign (supply, replacements, troop morale, and extreme mobility) are captured in both their effects upon the tactical situation of any given turn and upon the overall feel of the game, as the situation shifts from turn to turn.

The game begins with a *game set up* section during which the player(s) may specify: if they are beginning a new game or continuing a saved game; the difficulty

Continued on p.47

INTRODUCING A REAL-TIME WARGAME SO FAST YOU'LL CALL IT A STRATEGY ARCADE GAME!

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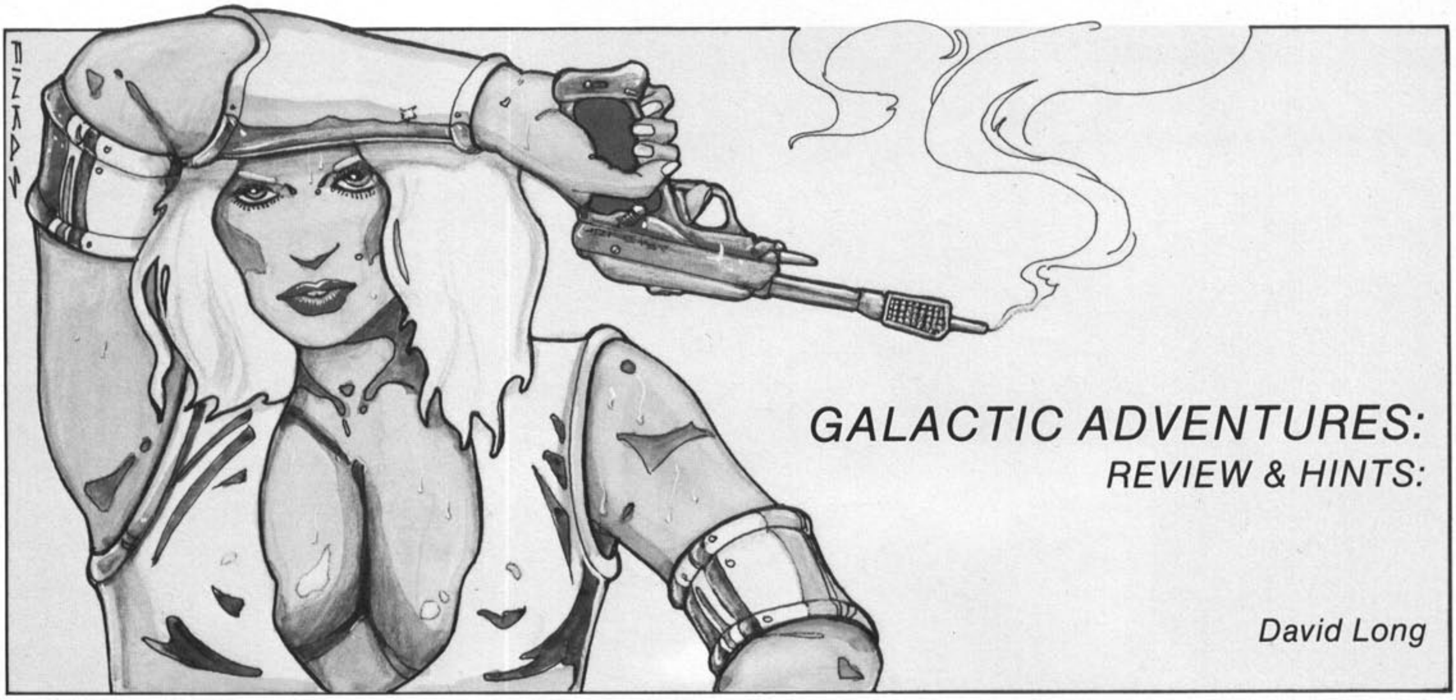
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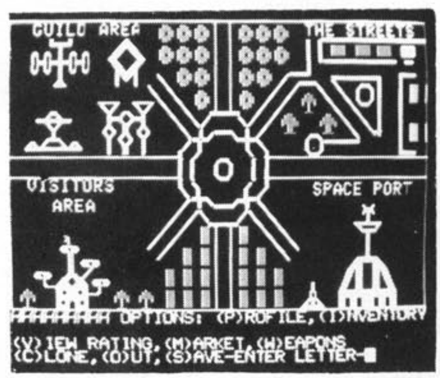


GALACTIC ADVENTURES:
REVIEW & HINTS:

David Long

Galactic Adventures (GA) is SSI's sequel to their outstanding game of individual combat in the 28th century **Galactic Gladiators (GG).** GA is a science fiction role playing game where you, as one of the seven regular species introduced in GG, progress towards the title of Independent Adventurer. Along the exciting and dangerous road to that ultimate honor, you'll probably create at least one clone, recruit and train companions, and scour the galaxy for treasures left by a long dead civilization.

Name:	**Galactic Adventures**
Type:	**Role-Playing/ Tactical Combat**
System:	**Apple II,IIe,III, Atari 400/800 (Winter 1983)**
#Players:	**1 or 2**
Author:	**Tom Reamy**
Price:	**$39.95**
Publisher:	**Strategic Simulations Mountain View, CA**



Characters have the same basic makeup as did those in GG; (see the review in CGW — Sept-Oct 1982) with the addition of leadership ability, sensitivity, and advanced skills. These include piloting, engineering and gunnery ability, (very necessary if you plan to journey in your own spaceship) as well as a wide variety of other skills. Weapons and armor are pretty much the same as GG, with the addition of "special" phasors and armor. Special phasors can fire five times before reloading, and special armor offers the protection of heavy armor without encumbering your speed or agility.

Your adventurers will also aquire (through purchase or by robbing defeated enemies) tools and special weapons (such as the matter beam, heat ray gun, robot scrambler and missile imploder) to enable them to survive and earn cash (Frilbees are the interstellar currency of the 28th century).

As introduced in GG, each regular species has its own home planet. And, to complicate your life, some planets have outlawed certain types of weapons. Earth, for example, allows no gemstones (a type of futuristic grenade), so be sure to sell off all your gemstones before heading for Terra, or the customs service will confiscate them from you.

It costs to feed and house you and your associates, so be sure to keep a cash reserve or they'll desert you (taking whatever weapons and assorted goodies they happen to have on them). Naturally, all but your clones and the special species whom you have purchased will expect to be paid on a daily basis and, the better they get, the more they'll want to be paid (sounds like our modern day athletes, doesn't it?). If you can't pay, it's adios, amigo!!

Each planetary system has four areas for your enjoyment (Visitor's Area, Streets, Guild Area, and Space Port). First is the *Visitor's Area*, where you can shop for tools at the market, make purchases at the weapons' center, or visit the clone master. I'd strongly suggest that your first item of business be to make two clones of your original adventurer. This allows you to have two unpaid yet loyal followers and to expand your fighting and job skills.

Next area of importance is the *Streets*, where you can improve

your originally meager fighting and job skills and can meet and recruit additional members for your band. In the streets you can Attack, Offer to sell something, try to get the beings you meet to Join you, Talk to them about buying something, or attempt to Bypass if they look too tough for you to fight and you think they may be hostile. *Attacking* is one sure way to get the action going and try to improve yourself, but there is always a chance that you'll be fined for disturbing the peace (half your cash), so be careful of attacking when you're financially well off. *Offering* is a good way to build your cash, but unfortunately, no one is interested in buying anything except special weapons or the fabled K-devices which you can only find on an adventure.

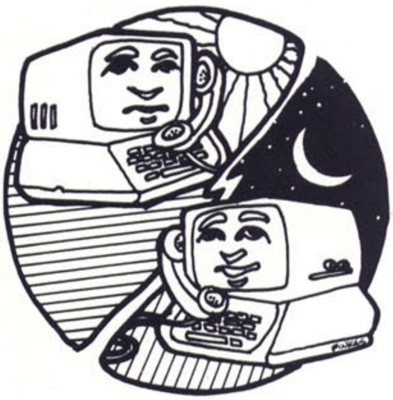
Talking will often result in your being offered a goodie of some sort, either a special weapon or a member of a special species, but these things, like everything worth having in life, cost money. There is also the chance that your Talking will result in the other guys Attacking you, so I'd recommend you not try to carry on any intelligent conversations with Berserk Robots or Asteroid Miners. They are very easily annoyed.

The other possible result of Talking in the streets is being offered one of the fourteen different types of jobs. Your ability to successfully perform a job is dependent upon your skill rating at that type of job, and to a varying degree on luck and intelligence. You cannot even attempt many jobs unless you have the proper tools. Once qualified, you have two options in attempting to successfully complete your assignment. The first is to play the Job Skills Game, best known in its more common form as **Mastermind**. You'll be given a random configuration of four members of the seven regular species. You must determine, through logical analysis, which species are in which slots before your allotted guesses run out. You'll get more guesses if your skill rating is higher than the job difficulty level (to a maximum of ten) and fewer guesses if the difficulty level is higher than your skill rating (to a minimum of one guess!).

If you don't feel like dealing with this option, you can opt for an abstract resolution where your chances of success are calculated by the artificial intelligence and your success or failure is immediately announced. I found that in crucial situations on adventures, where my skill rating was about the same as or a little worse than the job difficulty, I usually chose to play the game. Most other times, I preferred to take my chances with the abstract resolution and get on with playing Galactic Adventures rather than a guessing game.

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TELE-GAMING



Patricia Fitzgibbons

For a day and a night, the winds and rains have pounded unceasingly. Yet, you struggle onward — sure in your heart that the ancient scroll you seek will soon be yours. In the mists ahead, the shadowy outline of the evil druid's keep rises up before your tired eyes like some abominable netherworld creature. You glance at your companions and smile as if to say, "Be brave! At least we have each other!" They nod, determination shining in their faces. Unsheathing your broadsword, you approach the castle, willing, come what may, to meet your destiny.

You log off the system and gaze at the monitor, wondering what perils your mischievous dungeonmaster will present the next time you sign on to your favorite BBS.

Although relatively new to the computer gaming world, telegaming via private bulletin board systems (BBSs) is becoming increasingly popular. Most of the hundreds of BBSs throughout the country are owned and operated by individuals who want to share information about hardware and software, exchange programs, post advertisements and items of local interest, or enter into wide-ranging discussions with callers. Many others, however, are devoted primarily to game playing and, for the cost of a local or long distance telephone call, your modem becomes a passport to adventure.

To qualify as a "gaming BBS," a system should offer at least *one* of the following features: 1) an ongoing fantasy role-playing game (FRPG); 2) a message board that is used by callers to give and receive computer game-playing hints; 3) computer games that are playable online; or 4) computer games that are available for downloading by callers.

In this issue, I'll be listing some BBSs which provide FRPGs and/or gaming hints. Next time, we'll focus on boards that supply computer games for online playing and/or downloading.

A few important caveats should be noted before you explore this facet of tele-gaming. First, most of these BBSs are privately run, single-line systems; so, busy signals are not uncommon (especially during the evening hours). Also, from time to time, a terrific BBS will seem to simply vanish; this may be due to the System Operator ("SysOp") deciding to use his or her machine for other purposes. Finally, although most BBSs are free, some SysOps charge nominal fees for usage.

You don't need to be an expert at FRPGs to join a message board Although many BBSs offer advanced games, novices are usually welcome. One young lady, whose BBS "handle" is "St. Alia of the Knife", recounts her delight upon discovering fantasy game-playing BBSs: "Such fun! I just had to be a part of it! Now, I guess I spend about one to one-and- a-half hours per night in typing and reading messages. I'm currently involved in six games!" Another committed player is "Elrond Halfelven", a seventeen year old high school student who has strong opinions about the kind of bulletin board games he likes:"The most important criteria for a good game on a BBS are the same as for live games — you must have a good DM and good players; people who are willing to truly role-play. Also, in an online game, players should call in at least every other day".

Once you've sampled the fare on a few BBSs, you'll soon find which systems are most to your taste. Even if you don't wish to join an FRPG, you can participate in gaming discussions and exchange adventure gaming hints with other callers. Here are brief descriptions of four of *my* favorite boards, followed by a list of eighteen others which are well worth a visit.

Magnetic Fantasies—(213) 388-5198: Which extra-ordinary, marvelous, and outlandish BBS is run by two humans, three elves, and a very nasty dwarf named "Sir Twitt?" MagFan, of course. Located in Los Angeles and established in 1980, MagFan is the "granddaddy" of gaming BBSs. There are several FRPGs in progress on the board for players of all levels. Adventure game hints can be exchanged by leaving requests on the public board and receiving replies through private, electronic mail. Whether a caller decides to join a party of adventurers or merely to follow its exploits by reading the board, an enjoyable time is guaranteed.

White Pegasus—(214) 680-9322: Deep in the heart of Texas, a mythological beast thrives. It is nurtured by a SysOp named Shalanna who oversees five FRPGs and a "continue-the-story" fantasy book written by callers. Games in progress include two novice D&D™ games, one advanced D&D™ game, a science fiction game, and a wargame.

The Sanctuary—(201) 891-9567: If a bulletin board system could be compared to a small village, The Sanctuary in New Jersey is a burgeoning metropolis. This BBS has forty-one separate boards to choose from, as well as ongoing

Continued on p.50

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REAL WORLD GAMING



by Dan Bunten of Ozark Softscape

This is the last installment in this series on the design of simulation games. The previous topics were:

System Definition
Data Collection
Model Development
Programming (Game Design)

This time we will look at *Play Testing*. This is the "feed-back loop" in the process of creating a game. During this phase you take your design out of the closet and let it face the harsh light of player scrutiny. More often than not, you will at this point, discover that there are holes in your game that require you to repeat some of the previous steps. This can be much like the process of writing in which you revise your first draft to more clearly communicate your thoughts. All good writers re-draft their material repeatedly until they are satisfied with the way their ideas come across. They are "testing" their writing to see if it captures the images they meant to convey to the reader. During this testing, writers correct their spelling and grammar, but the main thrust is to examine content. Similarly, Play Testing must include more than fixing bugs in the program. The designer must look critically at the way the game plays. You must examine your game to see that it faithfully reflects the insight that drove you to create it.

This review process should include "unbiased observers" who will view your product as it exists rather than how you intended it to look. Play testers who were not part of the initial design will respond to your game like consumers who purchase it. Thus, you need to select your play testers with your audience in mind. If you are writing a wargame for wargamers, then you don't need people unfamiliar with these types of games as testers. However, if you are hoping for a broader market, then you must choose testers with a wide variety of backgrounds. Personally, I prefer a large and diverse group of testers for any game I write even if I know it will be targeted for a certain audience. The variety of views gives me a handle on how my product will be perceived.

Always include a few people who are interested in your game but have never touched a computer! These people will be your future audience and you must make allowances for them. There is no reason for someone to be "computer literate" to play a computer game. Games that assume that everyone knows to hit "return" at the end of a line are placing unnecessary obstacles in front of the "uninitiated". So, if you want to find out how totally novice computer users respond, you have to include them in your play testers group.

The best place to find such a diverse group is in a thriving computer club or user group. Such organizations will normally include people from the hardcore hobbyists and hackers to the first time computer owners who have only played arcade games. A good way to get started with a group is to offer anyone that would like it a free copy of your game in return for their suggestions.

After you have recruited your play testers you need to use them to your benefit. In some cases the program is not really firmed up yet and you will have to "walk them through" a demo while you explain what you intend to add. Then you can let them respond to what you showed them. However, it is almost always better to let them "hassle" with the game themselves to see what things seem to strike them. It just depends on how complete your game is before you start testing. I prefer to show a few testers (who have been helpful in the past) new ideas as early as possible. But, I wait before showing it to most testers till I have a good working program that they can actually play. Then when the product is almost complete, I find the non-computer types to test it.

In your relationships with testers, you have to work hard sometimes not to defend your game. Don't answer a suggestion with, "I thought about doing what you described but I decided it wouldn't work." A response like that will simply dry up the well of user

input. Instead just ask more questions and occasionally say "That's a good idea, I'll see if I can fit it in." This may sound obvious to anyone with a little experience in human relations, but you would be surprised at how hard it is to do when you've already spent six months nurturing your game and someone starts "nit-picking" about the graphics.

Even worse than the detractors are the testers that don't say anything. They are from the old school that believe if you can't say something nice then don't say anything at all. You have to "pump them" for their reactions or be satisfied with reading their body language as they play the game. So be thankful for the straight-forward types who tell you that they didn't like the game because it was too complicated. They are giving you information that will help you to make decisions.

Now that you have the testers' comments what do you do with them? I generally just wait for something to coalesce. It's obvious you can't please everyone. It isn't unusual to have conflicts where one person thinks something is too hard while another thinks it's too easy. Wait till a concensus forms even if it is only in your mind. Then I begin to make changes. Often someone will suggest something that I thoroughly agree with but don't believe can be done. However, while I sit and stew about it, I may discover a way to do it. Also, there are those times when you're better off *leaving well enough alone.*

I'm not sure how you can distinguish between good or bad advice. For myself, if I have a group of 30 testers (of whom 10 are active and helpful) and I hear a certain comment twice I consider it significant and if I hear it more than three times I call it an overwhelming consensus. This is because, in a big game, people don't normally notice the same things unless they stick out like a sore thumb. Finally, you can't ever be a good game designer if you aren't able to trash your "good idea" that didn't work.

Most of the previous suggestions for play testing would apply to any type of game design. However, simulation games provoke a certain type of user feedback because you are trying to recreate an intrinsically complex real-world situation in a game format. The battle you have been waging with yourself between realism and playability comes to a dramatic head during play testing. There are some people who enjoy the detailed accuracy of a simulation and demand absolute authenticity. There are other people who consider anything more complex than "Pac-Man" as pedantic and boring. Fortunately, the vast majority of people fall between these extremes. Nevertheless, there are still trade-offs to be made. My own method of design is to make the initial model as realistic as possible. Then to begin cutting it down until I have something considered playable by the target audience. The pieces cut out are not actually removed from the model, but are simply made more abstract. This way the game can stay fairly realistic except that some parts of the "system" are running on automatic. The greatest accomplishment is when the elements you have replaced with abstractions can leave the player with a feeling of "depth" in your game. At that point you've gained rather than lost realism.

Aside from the conflict of realism versus playability, there are other things that surface during play testing a simulation game. Pure math would dictate that you should not adjust the data collected to make your model fit your biases. You should just let the numbers stand on their own. However, there are times when you must revise "reality" to fit people's perceptions and preferences. For instance, in "Cartels & Cutthroats" (a business simulation I wrote in 1981), I had a realistic representation of how research and development expenditures affected a company's product sales. However, during the play testing it was apparent that most people believed that R & D should affect sales much more dramatically. I therefore adjusted the model until it "felt" right. This tendency for people to amplify cause and effect relationships has to be reflected in your model. In fact, it is almost certain that people respond better to a model with somewhat exaggerated effects than "true realism". This parallels the kind of artistic license that cartoonists use to make their characters more attractive. Caricatures must be overstated to be successful. It can be a little unsettling to have to "corrupt" your model to suit game player's tastes, but it actually improves the "apparent realism" of your game.

Finally, be prepared during play testing (more so than any other phase of game development) for unpredictable swings in your mental outlook. There will be times that you will wonder how you could have worked so hard for a game that isn't even fun! And then other times you will be convinced that your game is the greatest thing since paved roads! Play testers will build up your ego until you feel like a minor god sometimes, and take hammers to your feet of clay at other times. But remember, you chose to write a game and you'll just have to bear with the bad and hope for the good!

Dan Bunten is the author of COMPUTER QUARTERBACK, CARTELS & CUTTHROATS, and CYTRON MASTERS all available from Strategic Simulations. He is now a member of the Ozark Softscape group that wrote M.U.L.E. (a family game for the computer) available from Electronic Arts.

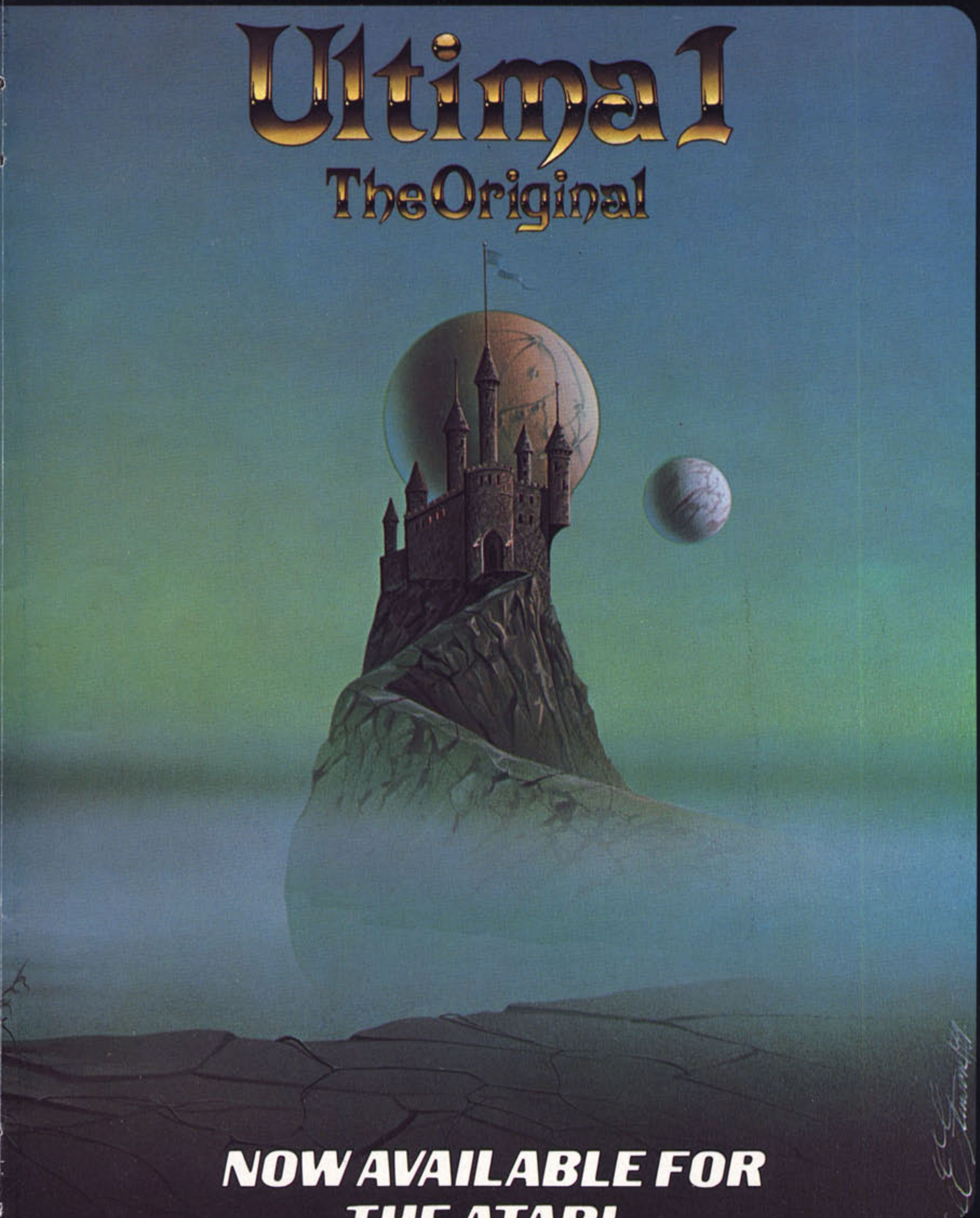
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ATARI ARENA

Allen Doum



THE ZEAL OF THE CONVERT

PINBALL CONSTRUCTION SET (PCS) looks like a convert. It's hi-res graphics are in white, purple, green and black.

PCS sounds like a convert. "Beeps" and "boops" are heard in great number. True, it does sound somewhat like a pinball machine. It also sounds like an Apple.

Don't misunderstand me, I think PCS is a great program. For a list of its' considerable strengths and minor weaknesses, see last issues review by John Besnard. What John says about the Apple version is all true about the Atari version. *That is the problem.*

The situation is this. It is easier to convert a hi-res, machine language program from Apple to Atari than to write a new program. Both machines use versions of the same microprocessor, Apple hi-res graphics are easy to simulate in *graphic mode 8,* and the Atari is capable of producing all the sounds that the standard Apple can. The programmer or publisher can, therefore, convert his game and increase his market by only re-writing some of the routines. The main logic of the program does not need to be changed. Same microprocessor.

Graphics provide a slight problem. Apple hi-res graphics use black and white as "primary" colors, with purple, green, blue and orange produced by taking advantage of the limitations of the picture tube. This is called *artifacting.* But the Atari only produces green and purple when black and white are the "primary" colors — the blue and orange are often lost in a converted program. (Machines equipped with the older CTIA interface chip reverse this. Blue and orange are displayed with green and purple lost). Of course, black and white aren't the only primary colors and *mode 8* is not the only graphics mode available on Atari. some converted games take advantage of this to produce more color, but some do not.

Some converted games upgrade the sound, too. Often louder and slightly better versions of the same sound. But rarely the music that is becoming standard on the games written directly for Atari machines.

PCS has, in fact, more than the usual share of upgrades. The moving "Icons" that the player uses to manipulate the game use player/missle graphics. And, you may use the button on a second joystick (to take the place of the second button on most Apple joysticks) when using the flippers.

That second joystick button illustrates how even a small hardware difference between computers can effect the play of a game.

In the game CHOPLIFTER, another Apple-Atari convert, the player uses a helicopter to rescue prisoners while fighting enemy tanks, jets, and airial mines. (CHOPLIFTER was reviewed in CGW vol. 2 no. 4) While the joysticks maneuvers the helicopter in both games, the Apple version uses one button to turn the chopper, the other fire the weapon; in the Atari version, the same button is used for both, a short tap firing the weapon with longer taps turning the chopper. This means that the player will mistakenly turn instead of firing at times, and it is not always convenient to line up another shot. Moreover, the program has to time how long the button is pressed to determine what the player is trying to do, making the controls sluggish. In short, CHOPLIFTER is not as good a game on the Atari as it was on the Apple and the difference is that extra joystick button.

What is happening here? Programs losing color when being converted to a machine with more colors? Losing controls when converted to a machine that supports more controllers? Why? Because they're *converts,* that's why. A converted game all too often will reflect the limitations of both systems, and the strengths of neither.

That is the point of all this. People buy games not only for how good a game it is, but also how good a program it is. Choplifter was popular on the Apple partly because of the amount of animation and the scrolling landscape. Such things are not often seen on an Apple monitor. On Atari, it's simply not as impressive. (PCS is still impressive, I keep wishing that there was a true Atari version.)

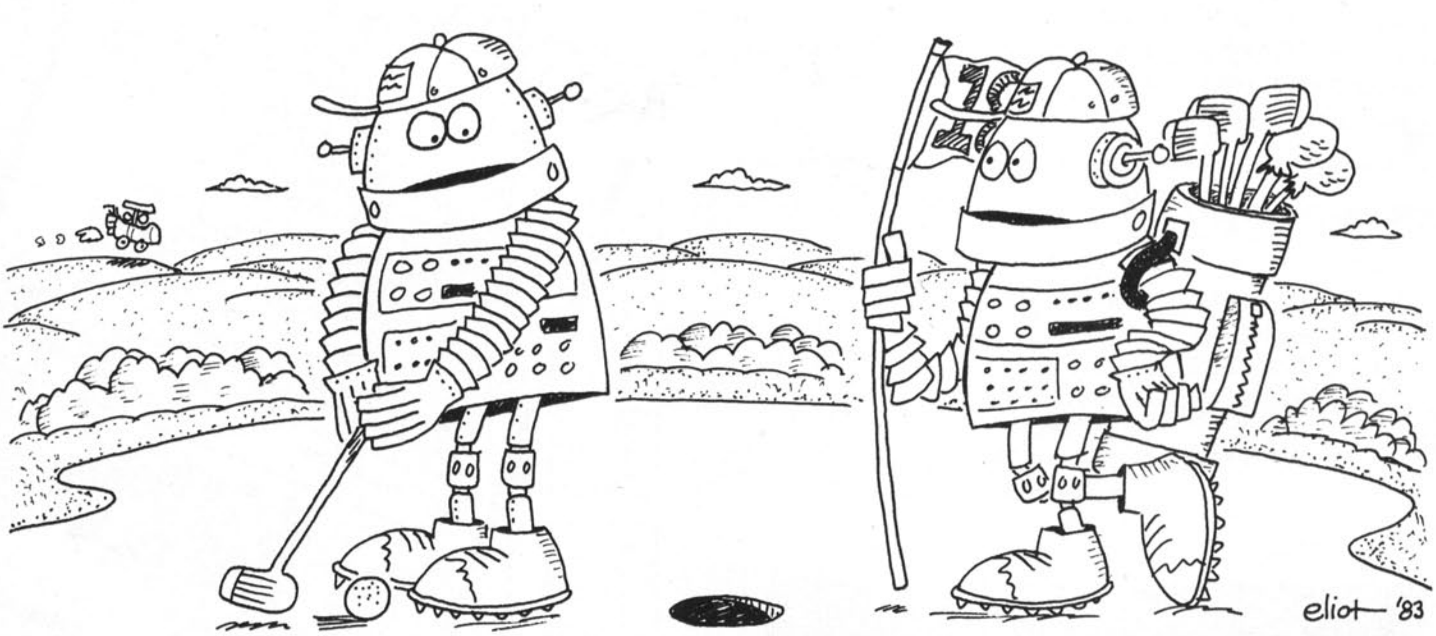
(Some of the companies producing games for the Atari are now converting those games for the Commadore, TI, and IBM. In this context it is definitely more blessed to give than to receive.)

If it's not converts, it's clones. With some of the games available for more than one computer it's hard to tell who is converting what, since the games become available at the same time for more than one computer. Two games from Adventure International illustrate an additional problem. SEA DRAGON is a "Scramble" type game. The player maneuvers his ship, in this case a submarine, through a constantly scrolling playfield filled with obstacles to destroy or avoid, in this case mines, depth charges, and the walls of narrow passages. Instead of a fuel supply, there is a diminishing supply of air, and the player must surface to

Continued on p.45

COMPUTER GOLF!

Stanley Greenlaw



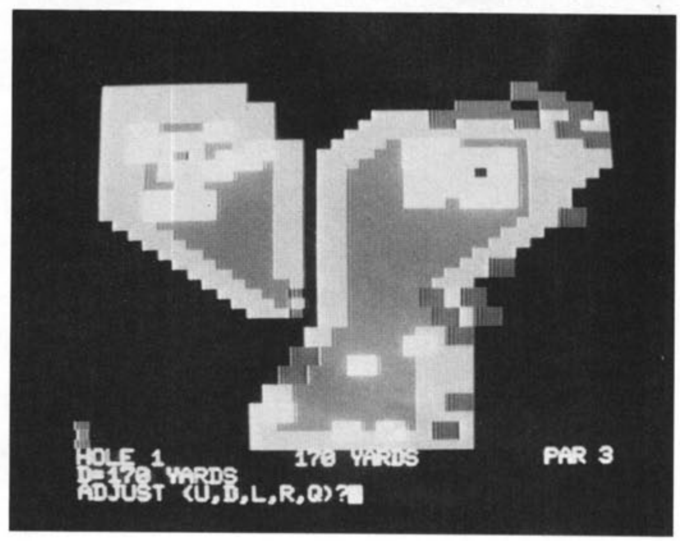
What golf ball are you using for today's match? A Top Flite #4? A Titleist #3? How about an Apple #2, an Atari #8 or even an IBM #1? Here are four microcomputer golf games that can challenge you on those nights when you have the "golf bug" or on that weekend when your regular match is rained out. Three of the games run on the Apple. The fourth runs on the Atari 400/800 and the IBM PC. All games can be played by one to four players.

FORE!

SYSTEM:	**Apple**
FORMAT:	**Diskette**
#PLAYERS:	**1-4**
AUTHOR:	**Jeffrey A. Johnson**
PRICE:	**$29.95**
PUBLISHER:	**EPYX Mountain View, CA**

FORE! is the only low-res entry of the games evaluated (for some unknown reason we called it hi-res in *Taking a peek—Nov.-Dec.82).* The game includes a driving range (for practice), a "public" 18 hole course and a "championship" 18 hole course. Typical of the designations, the public course is shorter and easier than the championship layout.

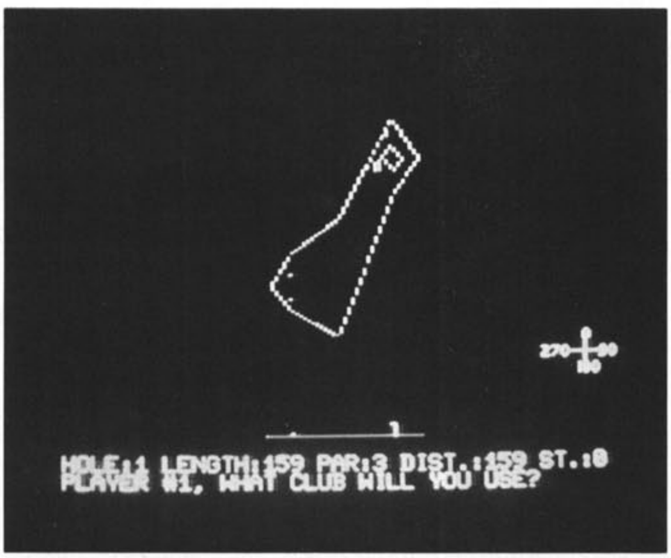
The lo-res screen presents one or two holes at a time. Screen colors indicate fairway, light rough, heavy rough, trees, water, sand traps, the green and the always popular "out of bounds". The computer does not keep a running total of strokes (as it does in the other games). A scorepad and pencil are provided however. The rulebook is adequate, providing the necessary information to play, as well as giving a description of the three common team play methods—stroke, best ball, and dutch. But there is little additional detail. For example: it would have been nice to know what process the computer goes through to determine if a putt is "in" or not. There is no speed to set and aiming a putt simply involves putting the on-screen cursor over the hole. Apparently only a random number generator has anything to say about whether a particular putt is "in" or not.



Game play involves moving the cursor to that part of the fairway or green that you are aiming at; keying in the club you wish to use; setting the strength of the swing: then hitting return. The main skill involved in the game is selecting the correct club and swing strength for your shot. The shot will fall more or less in the area in which you aim. Wind direction, which only changes after the first nine, can affect the flight of the ball. There is no save feature.

CHAMPIONSHIP GOLF

SYSTEM:	**Apple II**
FORMAT:	**Diskette**
#PLAYERS:	**1-4**
AUTHOR:	**Blair Hadfield**
PRICE:	**$24.95**
PUBLISHER:	**Hayden Software Lowell,MA**



The unique element of this game is that it shows both an overhead view (as the other 3 games do) and *a side view.* The side view adds a degree of interest as you watch your ball fly into the air, down the fairway, and bounce to its stopping point. Unfortunately the game does not capitalize on this feature. Trees (which are lacking in CG) seem like a natural obstacle that would have given the side view some real meaning in the game. Lofting a nine iron over a tree and onto the green would have been so enjoyable. Additionally, the program excludes the possibility of hitting your ball across a dogleg. With the side view it is tempting to loft a shot over a bend in the fairway, (going over the out-of-bounds markers) and back into "fair territory." Forget it. As soon as the program detects that your ball is over out-of-bounds territory you are counted as out-of-bounds, no matter how high your ball is nor the fact that the landing area would have been inbounds.

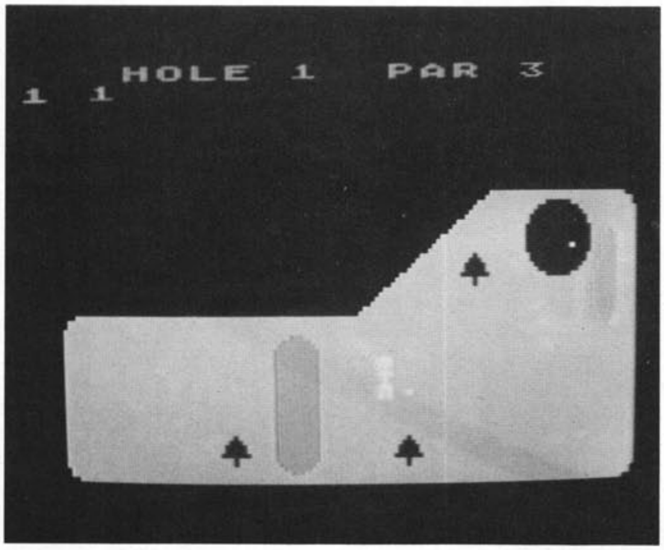
Actual play involves selecting club, swing strength and compass direction of shot (by keying in the compass heading). The skills required are the ability to select the right club and swing and the ability to figure out the correct angle. One hole at a time appears on the screen. Sand traps are often so small in the hi-res rendering that they sometimes blend in with the lines that make up the outline of the green. When you reach the green a blow-up appears and you putt out by selecting club head speed and angle of putt.

The computer maintains a scorecard for each player. The rules can be read in the manual or on the screen. A club selection chart can also be found in both places. Nine woods (that's right!), nine irons, two wedges, and a putter make up your twenty-one club arsenal.

GOLF CHALLENGE

SYSTEM:	**Atari (Tape)**
	IBM PC (Disk)
#PLAYERS:	**1-4**
AUTHOR:	**Harold Schwab**
PRICE:	**$24.95**
PUBLISHER:	**Sierra On-Line Coarsegold, CA**



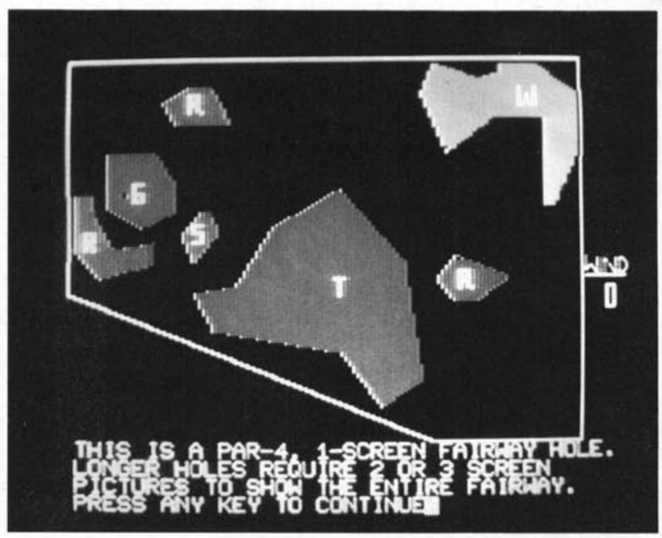


Unlike the other games in which you key in data on your shot, Golf Challenge is strictly a joystick oriented game. You move your player to the ball, positioning him for the best angle then use the joystick and firebutton to swing your club and strike the ball. The longer your backswing the farther your shot. Although the mechanics are more arcade oriented than the other games, you must still plan your shot strategically so as to avoid the rough, trees, sandtraps, water, and out-of-bounds. Playing this game reminds one more of a good video cartridge game rather than a serious simulation of the game of golf.

The key to success in GC is in lining your character up properly so that when you stroke the ball it will travel in the intended direction. Your player has an "I-beam" shaped body which with a little practice can be used to set up the angle of your shots. For example to hit a ball directly downwards (on the screen) you would line up the golfer so that the ball is to his left and directly in line with the upper cross member of the "I-beam". When you reach the green, it is enlarged so that you may putt out using the same techniques used on the fairway shots. The graphics of GC are the best of the games reviewed here. While less a serious simulation than the game which follows, GC has a charm all it's own as a video-style golf game.

HI-RES COMPUTER GOLF 2

SYSTEM:	**Apple**
#PLAYERS:	**1-4**
AUTHOR:	**Stuart Aronoff**
PUBLISHER:	**Avant-Garde Creations Eugene, OR**



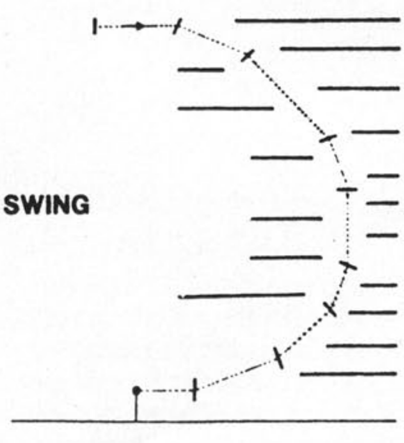
There is no doubt that this is the best golf simulation on the market. Any serious student of the game of golf will find in this game the mental challenges that he faces in the real thing as well as the need for practice to develop a "good swing" which is essential to the actual game.

HRCG2 is an improved version of Avant-Garde's HI-RES COMPUTER GOLF game that was originally released in November 1981. The second edition carries the label "Pro-Courses Series". It contains a two sided disk. One side is the "master diskette" which contains the actual program as well as the Demonstration, Practice Hole and 18-hole Beginner's Course. The other side is the "Pro-Courses Diskette" which contains three pro courses. The idea is that, if the market demands, other courses could be marketed in the future.

The documentation is excellent. In addition to the rulebook which is quite detailed, there is a demonstration program that walks you through the game step by step. OTHER GAME MANUFACTURERS SHOULD TAKE NOTE. This demonstration feature is the best tutorial this writer has ever seen in a computer game (and some of us can use tutorials on the more complex games)!

There are two ways in which you can play HRCG2. You can use the standard method in which after selecting your club/swing-strength/aim, you use the keyboard to guide the arc of your swing (see illustration). The other method is to use the auto-swing feature in which you get a perfect computer generated swing every time. This feature is a nice addition to HRCG2. Now players who have not the time to learn and practice the timed swing can still enjoy a round of golf more or less on equal ground with experienced players. However, the real enthusiast will opt for the regular timed-swing feature. This makes golf the true challenge it is in real life. Mistimed swings can cause you to hook, slice, hit fat or top the ball. The best aim and strategy is worthless if all you can do is top the ball or slice it into the lake. *In this normal play mode HRCG2 is a game that requires a good deal of practice to master.*

PERFECT NINE-KEY SWING



The fairways in HRCG2 are larger in scale than those of the other games which means that often two or more screens are needed to display the hole. At first this may be an irritation since you will commonly have to hit a ball located on one screen toward a landing area on the other screen. However you will get used to this quickly and the greater detail in the fairway layout due to the larger scale more than makes up for this minor inconvenience. The problem is minimized by the fact that most shots from one screen to another are shots not going directly for the green (i.e. tee shots on a par 4). Screens are easily flipped with simple keystrokes.

The game includes a scorecard processor with which you can make a hardcopy of your round, and save up to 20 games on disk. But the most exciting added feature is the Tournament play Option. Using this option it is possible to play a tournament of HRCG2 with other people through the mail. *Computer Gaming World is sponsoring the nation's first HRCG2 tournament.* See details following this article.

For the golfer, HRCG2 is the closest thing to actually being out on the course. It is our hope that HRCG2 sells well enough to justify the release of future Pro-Series Course diskettes.

CGW GOLF TOURNAMENT

Using Avant-Garde's *Hi-res Computer Golf 2* we will be hosting the first annual(?) CGW COMPUTER GOLF TOURNAMENT. Those that wish to play in this 54 hole competition will need a copy of HRCG2. (Note that the original HRCG will not work for the tournament. Players must have the "2" version). The winner of the tournament will receive a wall trophy.

How to enter:

1) Put your full name and address with your request to be entered into the CGW Golf Tourney on a post card.

2) Send card to: COMPUTER GAMING WORLD; GOLF TOURNEY; P.O. BOX 4566; Anaheim, CA 92803-4566.

3) Postcard must be postmarked no later than September 1, 1983.

4) Entrants will receive, after that date, tournament information and a special codeword required to play.

Summer Sizzle!



from

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Select your own way to heat up summer with one of these sizzling Avant Garde action games!

Start by strapping yourself into this summer's hottest new climber, **JUMP JET**; 20 tons of thrust packed into the world's most advanced aircraft, pitted against cruisers, submarines, fighter planes, anti-aircraft guns, torpedos and sea to air missiles. No doubt about its excitement, but take warning. This may be the trickiest action game you've ever played. (Apple)

Maybe you'd rather take it easy on one of Avant Garde's three **HI-RES COMPUTER GOLF 2 Pro Courses**, all included on one disk. Did we say, "take it easy"? Not a chance! This game's even more exciting than the real thing. The heat you feel won't be because of the summer sun. From the comfort of your air conditioned home you'll face lakes, trees, sand traps and roughs. There's a changing wind factor to consider and you can control your swing or the auto-swing can be used. The greens are even contoured. (Apple)

Or maybe your interests lie in other galaxies. Imagine yourself trapped in a mirror filled **LAZER MAZE**, knowing that an alien opponent is lurking nearby. He's waiting for you to fire your lazer at the wrong mirror, sending its reflected beam zig-zagging harmlessly out of his path, allowing him to fire upon you! Be accurate and be fast in this timed action game. **LAZER MAZE**, adding fuel to the summer fire! (Apple, Atari, IBM PC, VIC 20, Commodore 64)

Perhaps your idea of a hot time includes playing action arcade games? Then give yourself three times the excitement with **TRIPLE ARCADE INSANITY: Alien Onslaught, Galactic Conquerors** and **Andromeda Blitz**. One disk, three separate games. But keep in mind that you'll need up to six direct hits to destroy these pesky starhoppers. (Apple)

When we say summer sizzlers, we're talking hot action. The only question is: can you stand the heat?

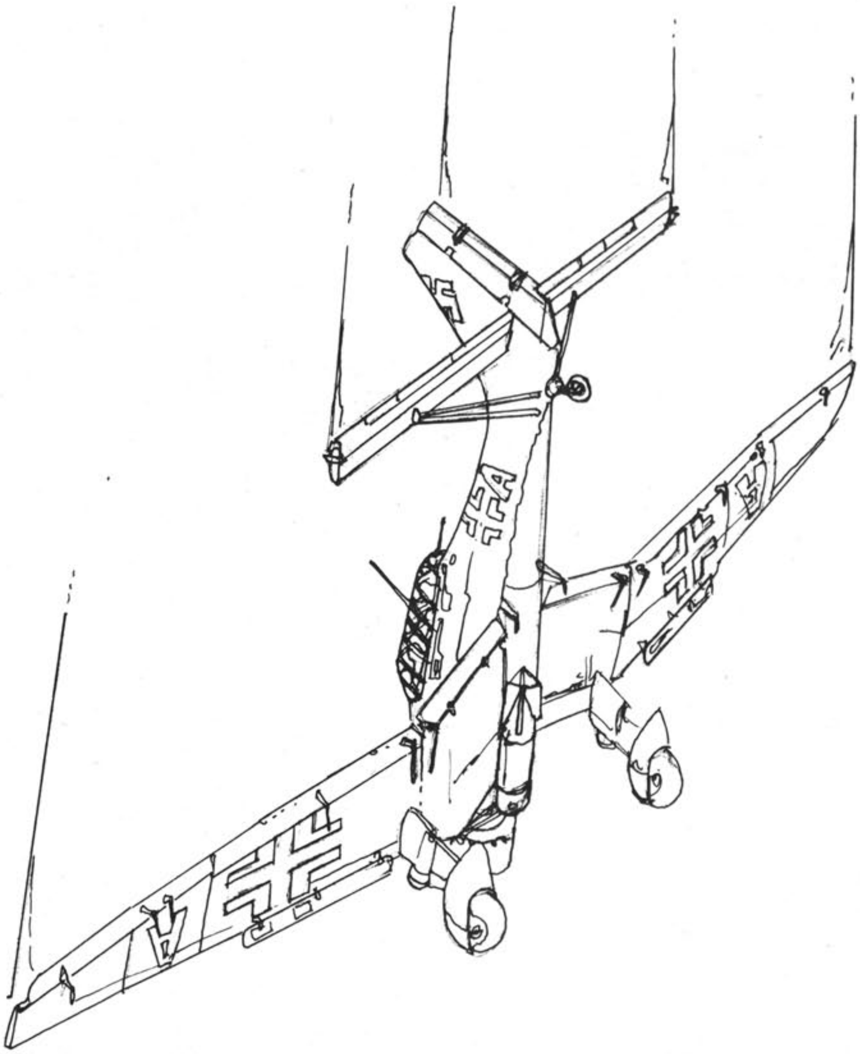
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BOMB ALLEY:

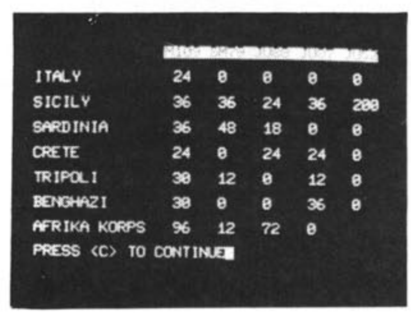
A Review And Analysis

Richard Charles Karr



Strategic Simulation's ***Bomb Alley,*** a recent release, is a direct descendent of the **Guadalcanal Campaign (GC)** game system and program. Based upon the naval/air campaign in the Central Mediterranean in mid-1942, it recreates the historically difficult problem of supply by the Axis and British. Designed by Gary Grigsby, with game development by Joel Billings, it shares many of the features and pitfalls of the Guadalcanal Campaign system.

NAME:	**Bomb Alley**
TYPE:	**Wargame**
SYSTEM:	**Apple**
FORMAT:	**Disk**
AUTHOR:	**Gary Grigsby**
# PLAYERS:	**1 or 2**
PRICE:	**$59.95**
PUBLISHER:	**Strategic Simulations**



About The Game

Bomb Alley is a grand tactical (Operational)-level game concerning itself with control of the Mediterranean and North Africa in 1942. As such, players control individual ships (from DML, DMS, DE, and SS on up) which are formed into task forces, individual planes (Spitfire, Beaufort, Swordfish, Boston, Do17, SM79, JU87, JU88, JU52, and Me109) which base out of locations on the map and fly missions, and the abstracted ground unit strength of the Malta garrison, the Tobruk garrison, the Eighth Army, the Afrika Korps, and numerous reinforcements and replacements.

The game includes an 18-page rulebook, floppy disk, and a 4 color map back-printed with appendixed gaming tables. Access to the program is by way of a "user-friendly" sequence of play: Axis task force adjustment and movement; British task force adjustment and movement; British air operations; Axis air operations; combat resolution; and save game option. The above is repeated for nighttime turns without air operations.

During the task force adjustment phase, ships may be formed into

task forces, be combined or divided between existing task forces, loaded, or just looked at. The status of air and ground forces can also be checked. During the task force movement phase, existing task forces are moved and docked. During the air operations phase, aircraft based at map locations can search, perform combat air patrol (CAP), launch strikes, or transfer. During the combat resolution phase, the effects of all of the above become apparent, as ground units attack, air strikes are resolved, surface and submarine naval combat is resolved, and ships are repaired.

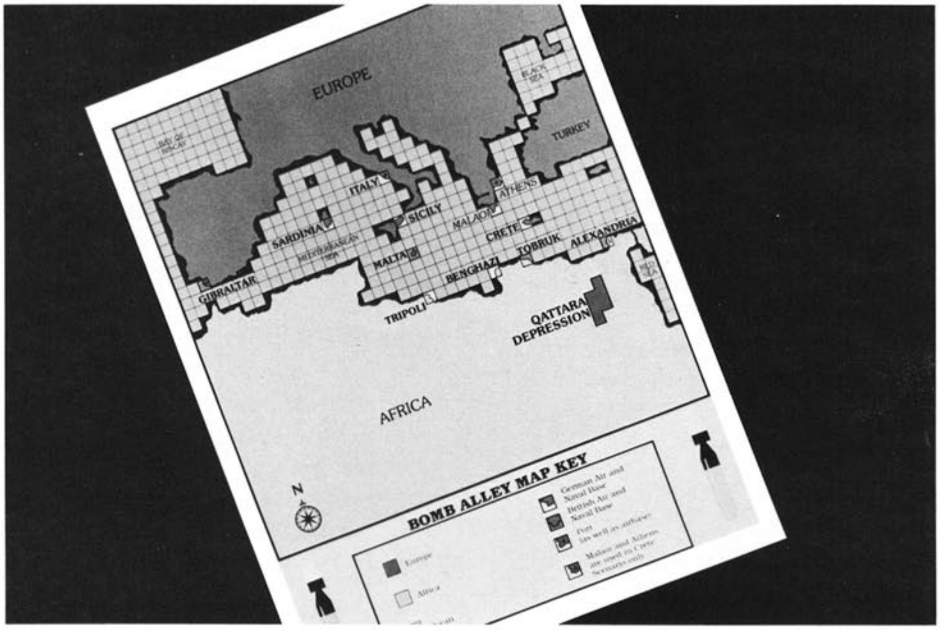
The actual mechanics of play are almost exactly the same as in GC with a few minor exceptions: two transfers are allowed per AM turn; motor torpedo boats (PT boats to Americans) can form their own surface combat task force, called "MT"; and evacuation missions are possible. The one-player option pits the Axis human player against the British computer, and two-player options are always possible. There are three scenarios to be selected from: *Campaign* (June 11 - August 31, 1942); *Pedestal* (August 10 - August 15, 1942); and *Crete* (May 20 - May 31, 1941). As in Guadalcanal, four levels of difficulty are offered.

The Game As Game

In GC, one side is holding an advanced forward base against the tender ministrations of the other side. In BA, both sides are holding forward areas subject to interdiction by air and naval forces of the opposition. Conventional merchant shipping in BA has a rough life on both sides, with the majority of ship sinkings in victory points due to losses in merchant shipping. As the Axis player comes to the realization that Malta must be suppressed or taken, extremely high losses in aircraft occur on both sides.

While the ultimate objective of an Axis offensive is Alexandria (worth 1000 points to the Axis and 500 points to the British), Malta remains the key to that objective. Three basic strategic options exist for the Axis player (in solo or two-player situations): ignore Malta, reinforce the Afrika Korps with everything, and try to blow past the Qattara Depression into Alexandria; suppress Malta with heavy air bombardment and then reinforce in North Africa; or suppress Malta real hard and then take it by combined amphibious/air attack. The British strategic options are largely dictated by Axis actions, the holding and reinforcement of Malta being foremost.

Tactically, the *Campaign Game* will have a great deal of submarine and MTB activity, with incessant air activity in the waters around Malta. Both sides are very closely matched, and losses of all types will be high. With time and sheer ruthlessness, the Axis player will be able to take Malta by combined air/naval attack, although



Alexandria will almost always be out of reach.

The *Pedestal Scenario* represents the major all-out reinforcement and re-supply effort of the British to keep Malta from falling. It is only a five-day scenario, and can be played in about three or four hours. Victory points will be based largely upon ship losses, and the destruction or survival of the four British carriers usually will decide the game.

The *Crete Scenario* concerns itself exclusively with the air/amphibious invasion of western Crete. The British have overwhelming naval superiority, the Axis has overwhelming air superiority, and victory is conditional upon who holds Crete and ship losses. The Crete Scenario is a twelve-day game, and will take 6-8 hours.

If players are used to the idea of 20-35 minute turns for two-player or 10-15 minute turns for one-player, Bomb Alley is an exciting and enjoyable "gamer's game", which is evenly matched, playable, and clearly written.

The Reviewer's Gripes

This reviewer feels that the basic scope and flow of Bomb Alley has a great deal going for it, namely playability, clearly written rules, and an approximately correct net historical result. For the average gamer, this is usually quite adequate. This reviewer, however, is very picky about the myriad aircraft designs used in the North African-Mediterranean Theater but not included, as well as the tendency for British ship speeds to be rounded up and Italian ship speeds to be rounded down. Endurance of individual ships should be a function of vessel bunker and store capacity, and should not be a set fixed maximum. Naval gunfire should be a function of size and rate of fire, not "main gun", "secondary gun", or "AA gun." The Italian Air Force (Regina Aeronautica) was actually not that bad, although in the scale of things it was too small for what it had to face in '42 and '43. The Italian Navy (Regina Marina) after the Taranto raid had a very mixed bag of ships. Some were as bad as the worst British World War One relics, most were very average, and a few were truly outstanding.

This reviewer realizes that it is difficult to accurately describe the performance characteristics of all of the strange odd-ball combinations of aircraft that floated through the Mediterranean in '40 -'43, but where are the Blenheims, CR32's, CR42's, and Hurricanes? The use of slightly abstracted air in Guadalcanal Campaign is understandable, as P40's were committed late in the campaign and often resembled the essential characteristics of F4F's, but the Mediterranean Theater is a completely different story. Historically, each side had the most modern and deadly aviation hardware available flying next to hopelessly inefficient archaic junk.

Wargames in the computer format should crunch through all of the dull, lengthy, neccessary mind-boggling detail that "monster games" attempt to present. Built into the program of a game should be the equivalent of determining shell penetration vs. armor, anti-aircraft fire vs. level of bombing attack, effective vessel operating range vs. station-keeping, and turnaround of "down" aircraft vs. the mechanical competence of ground crews and availability of parts. While these individual examples are themselves unimportant, the interface of combat should represent all of the nasty and technical "dirt" that the best historical research has to offer, instead of several percentage-based combat results tables. In short, this reviewer is hopelessly greedy for detail of the like presented in (the late lamented) SPI's *Campaigns For North Africa* (as one example) as opposed to the moderate-level of complexity titles that make for familiar wargaming soup.

Conclusions

For straight-forward playability and excellent rules preparation, Bomb Alley is an enjoyable and entertaining game of the Mediterranean during its most critical moments in 1941 and 1942. It offers moderately serious wargamers the opportunity to sink their teeth into something more advanced than arcade entertainment or very simple wargaming. In one-player or two-player format, Bomb Alley offers accessible "user-friendly" play of an exciting and difficult theater, with many tactical surprises and reverses in store. ■



THE NAME OF THE GAME

Jon Freeman

What's in a name?

No less a writer than the Bard of Avon once wrote, "That which we call a rose/ By any other name would smell as sweet." He was, however, being consciously ironic (a fact often forgotten nowadays), since it was indeed their *names* — signifying their rival (and feuding) family affiliations that doomed poor Romeo and Juliet. (Admittedly, their impetuosity didn't help much, either.)

Clearly, names are important. Good titles help sell games, books, movies, and a zillion other products. This month's topic is not, however, about titles (at least in that narrow sense), but something more general and more important.

Names — what we *call* things — influence (some might say *determine*) how we think about things and, consequently, how we act. As an instance, let's choose a subject near and dear to all our hearts: *game design.*

WHO ARE THOSE GUYS?

On the pages of every consumer electronics publication, we read articles about, interviews with, advice from, and instructions on becoming "game designers."

Probably 95% of those "game designers" cited (or quoted) *aren't.* They are basically and essentially something else entirely, and the confusion about what they are and what they are doing — a confusion shared by magazine writers, industry executives, game players, and often, by the "designers" themselves — has had a profoundly *negative* effect on computer gaming.

What or who *are* "game designers?" Especially, what are videogame or computer-game designers?

The obvious answer — those who design computer games — simply begs the question of what, exactly, *is* computer-game design.

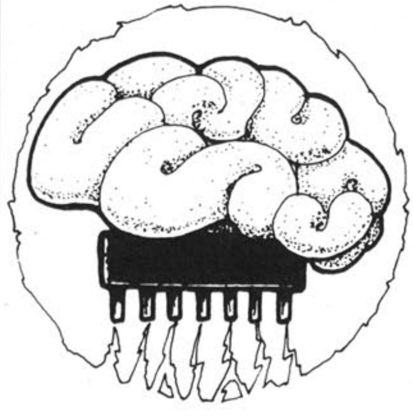
With board games, "we all know" the answer. The designer of board games is the one who conceives the idea of the game and works out the rules. The layout of the board, the number and kinds of pieces, strength, movement, money, dice, cards, whatever: all these things clearly fall within the designer's purview. Others may draw the final version of the board, paint the cover, mold the pieces, print the money, and so on — but the artists, graphic artists, typesetters, etc. are not game designers. "Everybody knows that", and for a change "everybody" is right.

The case of computer games is more complicated. There may be five different disciplines involved in the "design" of a computer game: game design and development, program design and execution, graphics design, sound effects and music, and the writing of the documentation. (The manual may contain information essential to playing the game well or at all; witness MURDER ON THE ZINDERNEUF or any of Epyx's pre-1982 games). Obviously, text adventures typically involve only the first two, and most vidiogames lack significant documentation, but more involved computer games like those just mentioned (or ARCHON or M.U.L.E.) involve all five.

One magazine defined "game design" as taking the concept of the game, the rules, the graphics, and the sound effects, and coding it into the computer so that the game will run. It's an amazing definition, *because it's 100% wrong.* That is *programming,* clearly, *not* game designing. Game design for a computer game is, in fact, exactly the same sort os stuff as it is in a board, card, or role-playing game: deter mining and defining *in detail* matters of game structure, aim, goal, subject, theme, layout, and so forth — who does what to whom, and what the result is.

Even in the (not uncommon) case in which a videogame is primarily the work of a single person, there are real problems with calling that person a "game designer." First is the problem of logical semantics: it is not reasonable to identify someone by what that person does an insignificant portion of the time. We don't call the executive producer of *Magnum, P.I.* an "actor" because in one episode he had a cameo appearance as a sleazy hotel manager. Carrying my suitcase into a hotel doesn't make me a porter, and dictating a business letter doesn't justify calling an executive a "writer."

Continued on p.45



THE SILICON CEREBRUM

by Bruce Webster

HEURISTIC SEARCH PART I

A programmer facing certain game problems can often solve them by "brute force" or exhaustive means. In other words, he can set up the program to try all possible combinations and then pick the best. For example, suppose he needs to move a piece from one location to another by the shortest route. If the board is simple enough, some sort of direct calculation will probably suffice to find the path. A more complex board may require that all possible paths be traced and the shortest one selected. But as the board's complexity grows, the program requires more resources (time and memory). At some point the costs become unacceptable, and the programmer has two options. He can make the board itself less complex (thus placing limits on the game). Or he can make the board *appear to be* less complex through use of *heuristic information.*

"Heuristic" is a term derived from the Greek verb *eurisko,* meaning "to find or discover" (hence Archimedes' exclamation "Eureka!" — "I've found it!"). Heuristic information, then, helps the program to find whatever it's looking for. It usually does this by providing some measure of how likely a particular choice will lead to the desired end. The program can then use this information to concentrate on the most likely choices.

When you think about it, the use of heuristic information represents an attempt to imitate our own thought processes. We usually don't examine all possible choices. Instead, we quickly narrow our options to a few and then examine those in more detail. If none of these are acceptable, then we have to expand back out to the options we initially ignored until we finally pick the one we feel is best.

In a like manner, the program can use heuristic information to cut down on the work it has to do. The information allows the program to concentrate on those choices that look best instead of considering all possible options. Whether or not the program performs better defines how "good" the information is. A lot of time, then, is spent in defining and testing different heuristics and combinations of heuristics. An example will help to illustrate this process.

AN EXAMPLE

Let's return to our example — moving a piece on a board —for a look at how we might use heuristics. Figure 1a shows our piece in the lower right corner of a hex grid. Our goal is the circle near the center of the map. Let's give the program the following capabilities (for starters):

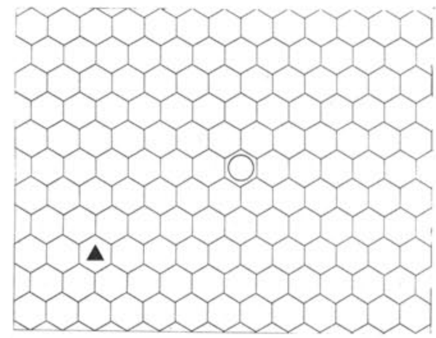


Figure 1a

(1) It knows what hex it's starting in.
(2) It knows if it has reached the goal hex.
(3) It can find all hexes adjacent to a given hex.
(4) It can tell if a given hex has already been used in a path it's tracing (to avoid duplication).

A pure brute force approach would be to trace all possible paths, then pick the shortest (or one of the shortest — there are quite a few paths that qualify). We would have to trace quite a few paths (anyone care to calculate exactly how many?), ranging in length from 6 to around 143 (the theoretical maximum). Lots of time, lots of memory.

One heuristic technique leaps immediately to mind: reject any path once its length is greater than the shortest path found to date. We still have the logistical problem of saving all the paths tried so far (to avoid duplication), but now we have to save much less of them and can actually throw portions of them away as shorter paths are found.

A much more powerful piece of heuristic information is a *distance* function which, given two hexes, returns the distance of the shortest possible path between them. Such a function is possible if some consistent numbering system is used (like those found on most wargame maps). Our search becomes *directed,* and we now use this algorithm:

Continued on p.49



the learning game

Bob Proctor

BASIC INFORMATION

NAME:	**Dragon's Keep**
TYPE:	**Adventure**
SYSTEM:	**Apple II**
FORMAT:	**Diskette**
BACKUP:	**None**
# PLAYERS:	**1**
PRICE:	**$29.95**
PUBLISHER:	**Sierra On-line Coarsegold, CA.**
NAME:	**Snooper Troops II**
TYPE:	**Detective Adventure**
SYSTEM:	**Apple II (48K) or IBM**
FORMAT:	**Diskette**
BACKUP:	**None**
# PLAYERS:	**1**
PRICE:	**$44.95**
PUBLISHER:	**Spinnaker Software Cambridge, MA**

"You are standing at the end of a road before a small brick building. Around you is a forest. A small stream flows out of the building and down a gully"

Sound familiar? It's the start of the original Adventure game, of course. Do you remember how you felt the first time you played Adventure or and adventure-type game? I can; in fact, I remember it better than my first kiss.

Adventure games are absorbing; you get very involved in the story, almost as if you were a participant. Involvement equals motivation. You want to rescue that princess or find that last treasure so much you can taste it! You become so dedicated to the task that you're willing to steal food or kill an occasional troll in order to reach your goal. Why, you'd even learn something new if you needed the information to solve a puzzle!

So why isn't this format used more for educational games? Sure, there've been a few attempts: there was a game called OREGON TRAIL where you tried to lead a wagon train safely west. It was simple, but a step in the right direction. Then there's TIME ZONE, which does contain a lot of history in an incidental way. But most of the games available today have a fantasy theme, with the major categories being music, science fiction, and mystery.

Why hasn't anyone done a game that teaches you how to survive a plane crash in the wilderness? After all, OUTDOOR SURVIVAL has been very popular board game for years. Or why hasn't somebody used a space adventure format to teach the basics of physics? Or maybe you get left behind by your tour group in a foreign land and must learn to "speak" the language in order to ask for food, shelter and help?

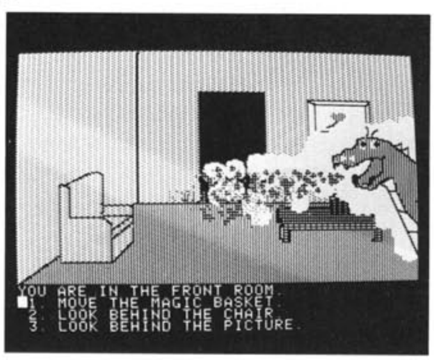
I don't mean to suggest that topics like these are more entertaining than swords and sorcery, or solving murder mysteries, but wouldn't you rather play an adventure game than read a text book? We don't have to make a choice between entertainment and education, we can have BOTH.

There is, at least, one area where these ideas are being put into actual use — adventure games for children. This month we have two examples of this sub-genre. The first is *Dragon's Keep (DK)*, originally published by Sunnyside Software but now being marketed by Sierra On-line. The second is *Snooper Troops II (ST2)*, by Spinnaker Software.

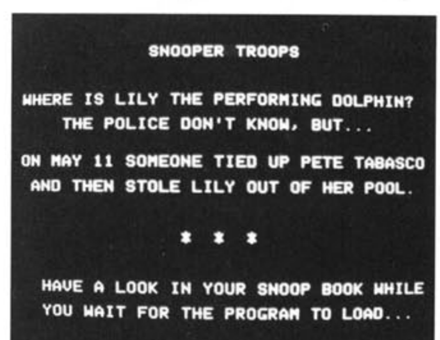
DK is designed especially for second-graders. How do you do that? Well, first you restrict yourself to words that a seven-year old would know, then you make the decision making process easier by providing a list of choices at each step of the game. Finally, since second-graders may not be fabulous typists, you make it so the whole game can be played with only the return key and the space bar.

The theme of DK is that a

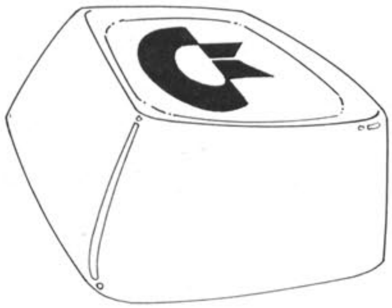
Continued on p.49



Dragon's Keep



Snopper Troops II



THE COMMODORE KEY

Greetings, and welcome to a new column for Computer Gaming World — The Commodore Key. If you haven't already guessed, this column will be dedicated to the investigation of those games and game related software for the Commodore 64 and Vic 20. Our title was, after much deliberation, chosen from a host of suggestions. While all had some feature in their facor, and some had the nautical connection found in may Commodore columns (Listing to Port for example), we decided on this title as we hope that our column will truely become your key to enjoying your Commodore computer.

C-64 - Edward Curtis

This installment of the Commodore 64 section of the Key will, unfortunately, contain very little. At the date of our typesetting, a sea of Vic-20 games had arrived, but very few submissions for the C-64. It is not my intention to spend time reviewing translations of well known games that have no substantial difference in their C-64 versions. This policy rules out the vast majority of those now on the market, but this situation will soon be remedied, as a tidal wave of C-64 programs are about to hit the market.

Typical of minor variations that in most cases will not find their way into the Key, are those done on two games by Avalon-Hill — *Nuclear War* and *Telengard.* The play of these games is exactly as it is in their counter parts for other machines. Their only claim to individuality lies in the improved use of graphics (much improved in the case of Telengard) most often accomplished with sprites. The sudden creation, for example, of differing creatures and treasures in Telengard, while a simple change, does add significantly to the *enjoyability of the game.* All that we C-64 owners can ask for, is that future translations at least equal this level of sophistication.

Vic 20 - Dr. Johnny L. Wilson

Even in the early version of *Sword Of Fargoal,* this is an exciting and intriguing adventure game. The graphics are beautifully crafted from the detailed stones of the dungeons rune-like titles and clever monsters, to the game utility that allows the player to select the background color through which he/she wishes to journey. The documentation is complete and extremely helpful. It includes a detailed description of each magic spell to be found, strategy suggestions from the playtesters that actually help, and a ready-reference card with a summary of commands. Add to these features the fact that a player must successfully traverse at least 29 different dungeon levels (15 down and 14 to return) to find the sword and you realize how many hours of challenging fun are involved in this game.

Early purchasers discovered two major problems. One concerned a *with/for* instruction in line 12 and the other involved a bad *subscript error* in line 262. (This is supposed to be corrected in the later version.) If you have an earlier version and don't know what to do when a glitch occurs, simply break the program and type either *GOTO 2* or *GOTO 3.* Either of these commands will take you back to the beginning of the level you are currently exploring.

Armed with that information, the adventure will run relatively smooth. The story line is simple. The Protectorate Sword has been stolen and without its benevolent magic, your land is vulnerable to attack from the pernicious minions of evil and their sinister spells. Your mission, since you are divinely ordained by the digital deity of your choice, is to explore the 15-20 dungeon levels necessary to find the Protectorate Sword and then make your escape in 2000 seconds (33 minutes) of real time. You explore each level, using your joystick to manipulate your character step by step through a darkened maze. Each step illuminates a little more of the maze and you eventually wind up with a fully mapped dungeon level on your screen. The screen takes the vantage point as though a camera were positioned above the character's head. As you traverse each level, you will encounter hostile monsters, bags of gold, temples, and checkerboards. The monsters cannot be negotiated with, only fought or avoided. The gold is only useful as a sacrifice to be offered in the temple. In return, you are rewarded with experience points. The checkerboards can mean: 1) magic spells, 2) traps, or 3) maps of later levels of the dungeon. Explore these last, so that you can avoid having to face a monster immediately after being devastated by a trap.

All in all, even with the program glitch, I enjoy the game. My worst moment came, however, when I was killed by a fire drake and still had 4 healing potions in my inventory. This, in spite of the statement on page 15 of the manual that *"When your hit points fall below 0, a Healing Potion will be taken automatically",* frustrated me greatly. I know not to wait on that feature at the lower levels, now. Remember, if the program does something like this to you, you can always break the program and follow the procedure outlined above and get a fresh start on that level.

Once it outlives the reputation of the earlier version, *Sword of Fargoal* should be a perennial favorite among Vic users. EPYX, Sunnyvale, CA. 94086 $29.95 (16K Expander req.)

Micro-Reviews

MOVIE MICRO REVIEW
"WARGAMES"

"Is this a game or is it real?" the panicked protagonist queries the Department of Defense's master computer in MGM/UA's new movie "Wargames." "What's the difference?" comes the frightening reply..."Wargames" is plausible enough to intrigue and terrifying enough to excite. Unlike many "pot-boilers" which simply build to a holocaust or pyrotechnic excellence or a denoument of moralistic salvation, "Wargames" makes one think, as well as feel, all along the way.

The plot line centers around a high school student whose whole life revolves around digitized circuitry. He is an underachiever in all areas *except* electronic endeavors. He is an opportunist who uses his one area of expertise to smooth out difficulties in the rest of his life. His amoral attitudes and electronic excellence lead him to defraud himself and his school (by changing grades and records), the telephone company, and by intent, a computer software corporation. By chance, he interfaces with a top-secret government computer instead of the one he intends to "break" into and "enter" data upon. His ingenuity and seemingly natural bent toward computer larceny enables him to circumvent the security system and set a potential nuclear war in motion. You'll have to see the movie to find out if it can be stopped.

There are several unanswered questions implicit in the film. The first is, "How secure is computer security?" The implied answer is the same as R.A. Heinlein's in *Friday*, "...electronic records aren't really records..." (p. 5). The very ease of change and correction that makes computers desirable to use makes them vulnerable. If one can find the legitimate password or the illegitimate "back door," electronic records can make anyone an expert forger.

Second, the film seems to ask, "What purpose does data collection and real life simulation fulfil?" This is the necessary corollary to the protagonist's query above. If the purpose is simply *to win* at any cost, the simulation is of doubtful value. If the purpose is *to learn* from both correct and incorrect hypothesis, then the simulation is of immense value. The implied answer in the film is that we must be careful about what use and intent we have in collecting data and constructing computer models. David, the film's protagonist wants to play *to win*, but has to learn to play *to learn*. Like many wargamers, he learns futility of war through his experience.

Lastly, one cannot ignore the ethical question, "Is the capability of accomplishing something equivalent to the license to do it?" David seems to think so. He is perfectly willing to change grades, steal games, and charge others for phone time. We admire his ingenuity, but cannot condone his actions. The Air Force general seems to think so. He is willing to destroy millions of lives in order to "win" the war. I hope the film's message is a resounding "NO!" to the question. It was to me.

Computer hobbyists of all kinds will benefit from viewing "Wargames." We may not all be able to afford the sophisticated Televideo equipment used in the film, but we all have to answer the three questions to our and society's satisfaction.

Dr. Johnny L. Wilson



BASIC INFORMATION

NAME:	**Wizplus**
TYPE:	**Utility Program**
SYSTEM:	**Apple II Plus 48K of Memory**
FORMAT:	**Single disk**
AUTHOR:	**Thomas Conner**
PRICE:	**$39.95**
PUBLISHER:	**Datamost Chatsworth, CA 91311**

"WIZPLUS" (WP) is a menu driven utility program designed to modify the characters and the playing environment which have made the game of WIZARDRY addictive to many enthusiastic gamers around the country. WP has options to allow the modification of all the attributes associated with the individual game character. In addition equipment which would normally be won through intrepid adventures need only be chosen from a shopping list using an option called "BOLTACS SWINDLE".

WIZPLUS impacts play in the first two WIZARDRY scenarios allowing the player to bypass the careful game design which allows progress through adventuring. WP also has excellent documentation which is well written and illustrated. This program covers all facets of modifying your favorite character. Using this utility, it is

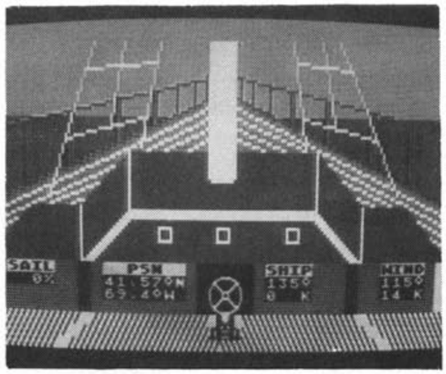
possible to recover *"out"* characters, one of the most frustrating disasters which can happen while playing Wizardry. *Hit points* may be recovered, *ability scores, age, gold,* or *experience points* modified. WP will also change your favorite characters *experience level, name, password, race, status,* possible *hit points, class, alignment,* and finally, deftly *add both Priest and Mage spells* without benefit of ordination. There is also an option called the *WizPlus Madi Special,* which makes the characters status *ok* (even if deleted), lowers the age, sets the adventuring status to *IN* and finally sets the possible number of spells which may be cast to nine. Other options on the menu allow the display of your characters attributes, recovery of characters from Wizardry's version 1.0 backup, or the movement of characters between scenarios without deleting them from the previous scenario.

[Note: Backups should be made before using WizPlus, as on three occasions while writing a character back to the scenario the program malfunctioned and the characters were permanently lost.]

The author of WizPlus indicates abuse of his program will destroy the careful balance which the authors of Wizardry have designed into their games. A serious problem also exists with the use of this program, as once a character has been modified, it will not be possible to transfer the "Spirit of the Ancestor" into the third scenario "The LEGACY of LLYLGAMYN". As a result of improvements in the new scenario increasing the playing speed, characters which have been modified will not transfer. Thus, those gamers which have enjoyed the first two games should be aware that the use of WizPlus destroys characters for further play in this exciting series. WizPlus should be used with great caution or the spirit of adventuring will be diluted and, more importantly, you will not be able to continue with this exciting series.

Bob Reams

Ed. note - Sir-tech tells us that if your Wizardry program has been modified by WizPlus the warranty on your Wizardry disk will no longer be honored.



BASIC INFORMATION

NAME:	**Clipper**
TYPE:	**Simulation**
SYSTEM:	**Atari 400/800/1200 Basic Joystick**
FORMAT:	**Disk (32K)/Cassette (24K)**
# PLAYERS:	**One**
AUTHOR:	**John Bayes**
PUBLISHER:	**Program Design, Inc. Greenwich, CT.**

Grab your charts, lads, it's time to sail your Atari's from New York to San Francisco via the perilous Cape Horn passage. In this sailing simulation you are asked to Captain an 1850's Clipper ship to fame and fortune. PDI has included a cassette for voice narration, but the cassette is not necessary to play the game. After my third voyage I got tired of listening to the sea chanties and optioned the program to ignore the cassette. After booting the game you go through a setup phase in which you must choose your *ship size,* amount of *cargo,* number of *crew,* and amount of *provisions.* As the object of the game is to sail to San Francisco with a large cargo which can be sold at a vast profit, the larger the ship you sail the better your potential for high scores. However, the larger ships require *more crew,* and *more provisions.* It's also a good idea to hire more crew than necessary as many unforseen events will trim your crew to the bare minimum during the voyage. Finally, when selecting provisions allow enough for a long voyage, as running out of supplies can lead to mutiny and quick defeat.

The game is played from a graphics display of a clipper ship's bridge. The display contains information on wind speed and direction, ships heading and direction, and percent of sail currently set. The joystick is used to alter course or percent of sail and to change the displays from bridge to ship's log to map and back to bridge. The ships log gives much valuable information including the ships current position in latitude and longitude, number of days out of New York, provisions left, and status of the crew. The map display shows the position of your ship in relation to North, Central, and South America. You sail the ship by altering your course to take maximum advantage of the wind direction. As you sail, many hazards will be encountered; such as mutiny, illness, storms, rogue waves, and submerged reefs.

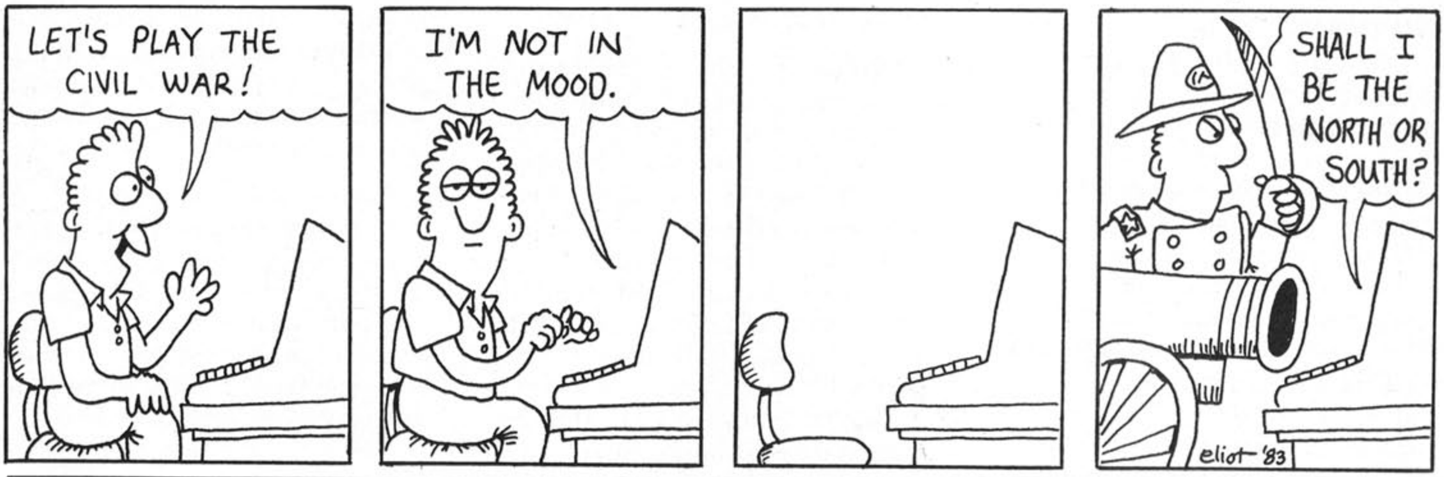
The game plays well but I found the constant shifts in wind to be a bit frustrating. The instruction book is very helpful and gives many hints on how to play this game. It also includes a little historical background on Clipper ships and a playing aid to help novice sailors keep their Clipper on course.

Mark Bausman

PLEASE TAKE TIME TO FILL OUT READER INPUT DEVICE

CHIP & FERB

by Mark Eliot



ATARI (Con)

replenish it.

That is, you have to get air in the Atari version. In the Apple version you don't. You also get a supply of "smart bombs", missing in the Atari version. In the Apple version the whole thing takes place in a large cave, and there is a "radar screen" that displays the players progress. In the Atari version you have to remember how far you've gone.

In other words, even though these games have the same name, come in the same packaging, from the same publisher, they are not the same game. They are similar, but not any more than any other two "Scramble" games.

The same thing happens in STRATOS, for Atari and TRS-80. In both, the player defends a city from aliens with laser cannon and a force field. In the Atari version the player also gets a repair ship for the force field. The TRS-80 owner is on his own.

The upshot of all of this is that when somebody says (or writes) that he has a great game for his computer, it doesn't mean that it's a great game for your computer. Besides the differences in graphics, sound, and controllers between the two machines, there is the possibility that it's not even the same game. *Caveat emptor,* and what else is new? ■

NAME (Con)

The typical "videogame designer" may spend close to 75% of the time on program design and coding, perhaps 15% on graphics *design,* less than 10% on sound, and whatever's left (not much) on actual game design (and none at all on documentation — but that's another story). If the game is a home version of a coin-op or just a rip-off of someone else's game, *no* game design is performed; it was all done by someone else, beforehand. Therefore, most "videogame designers" are more properly termed "program designers" or "game *programmers.*"

CAUSE AND EFFECT

Even if logic and language don't move you, there are a number of practical consequences of this misnomer — and they're all bad.

The mildest, perhaps, is that many programmers get "delusions of grandeur" and think that they really *are* game designers. This is rarely true. (Dan Bunten, Chris Crawford, and Robert Leyland have talent in both areas, but they don't have a lot of company.) I am *not* denigrating programming, which is obviously essential to a computer game. Good program design is as much an art (and potentially as creative an art), as game design. Games "designed" by programmers tend to be simple and unoriginal; games "programmed" by designers are almost inevitably overweight and clumsy. If you can describe the "game design" in twenty-five words or less, it was done by a programmer; if a 48K game has primitive graphics and takes twenty minutes for the computer to make a move, you can bet it was programmed by the game designer.

The obvious "answer" to the problem of two disciplines requiring two different talents and ways of thinking — a collaboration between two people, one a game designer and one a programmer — is not at all "obvious" if you've been led to believe there's only a single task involved.

If *program* design is called "game design," then *real* game design has no name, no significance, and no attention. It is, at best, an afterthought, more often slavish imitation, at worst a blatent rip-off. Why not? If credit for "game design" is given only to *program design,* who cares where the "game" comes from originally? If the act of conceptualizing and creating a game and the act of cleverly ripping someone off are given the same name (i.e. "game design"), the two acts will be granted equal respect. Shakespeare and your local check forger get equal billing, and a programmer can get *praised* for *creating* (!) "the best PAC-MAN-type game."

What's in a name?

When the name of the game is "game design," *plenty.*

Ed. Note: Jon is the co-author of Murder on The Zinderneuf and Archon. ■

NORMANDY (Con)

avoids the strongest German defenders. The historical plan was designed to cut Cherbourg off from reinforcement, but in the game, isolation is not necessary (indeed, being isolated appears to have no effect on the pocketed defenders). In every game that I've played, the computer sends one and only one reinforcing division (the 77th) to aid Cherbourg, regardless of what the Allies are doing. In order to capture Cherbourg before the end of the game, earmark three infantry divisions and one armor division for the assault and send them breaking due north from Utah beach as quickly as possible.

Tactics

So, how does one win at the *game* of BFN? You should: 1) take Cherbourg (!), 2) clear all Germans from the coastal zone, and 3) take either St. Lo or at least one hex of Caen. In doing this, bear the following in mind:

1) A stockpile of "general supply" points (about 600) should be accumulated before June 18, when three turns occur with high probability of a storm (this stockpile is in excess of points used each turn). 2) Don't waste combat points on useless, low-odds attacks. 3) Get the four armored divisions into action as quickly as possible, keeping them on the front line and infiltrate with them as often as possible. Their fatigue levels will suffer, but their presence can break up the German defense. 4) On the rare occasion when a German unit attacks, consider retreating the defending Allied unit. German units *always* advance into a vacated hex and you can often sucker them into a trap or lure them away from an important position by falling back before the slightest attack.

However, whether or not historical tactics lead to victory need not bother you when you sit down at the monitor; BFN is a challenging game. I'm just glad that Eisenhower didn't use it to rehearse for the real thing. ■

SUSPENDED (con)

Obviously, this information gathering process is time consuming, and when you get to the stage of putting the pieces together to complete the adventure, there will be no need to send WHIZ to the CLC. Also, the game can be successfully completed without accessing the CLC at all. So, if you are a die-hard adventurer who thinks hints are for sissies, don't plug WHIZ into the CLC. But, be prepared to see the shadow of your replacement clone more than just a few times.

One can't help but wonder, "What if Infocom hadn't provided the map of the complex? What if they hadn't provided an integrated hint system? ...would the game still be playable?" The answer is "yes" — however, it would have been not only a different game, but a different type of game, more like the early-style adventure where all you knew was that you were to explore, collect treasure, and perhaps, escape.

If you are an adventurer who is looking for a treasure-based adventure, and take special delight in exploring and mapping each room for yourself, or discovering if there even is a next room, then that aspect of Suspended will not excite you.

About strategies. You will want to develop your own strategy for mastering the game; however, when you first get started, forget about fixing the filtering computers, that'll come later. First, get to know your robots. Explore each robot's capabilities and limitations. Take them all to the same room and compare their reports. Like the well-worn tale of the blind men and the elephant, the robots will each give you their unique, but incomplete, perspective.

As the robots find objects, things that need to be done will become apparent. Soon, you'll be on your way to putting together the pieces to complete the adventure. You'll discover that there is more than one way to complete the adventure. Without revealing what they are, let's just say that your friend's lives are in your hands.

As you command one robot to go here, another to go there, the game becomes like running a very, very complex football play. Each player must be in a certain place at a certain time for the play to work. Also similarly, there's more than one way to make a touchdown.

The same disasters strike at the same time every time the standard game is played. Note when these occur, and consider strategies to get certain things done before they occur. One thing that does change is something called the "reset code". When you find out what it is, be sure to write it down — it's different each game. You'll also discover how each of the planet's systems can be monitored and manually controlled from within the underground complex. Bringing the systems under control is essential to minimize surface-side deaths until you replace the proper cables and bring the filtering computers back into balance.

Finally, fear and terror are underlying themes of the game. However, don't let an unfounded fear that the game is too complex keep you away from it. True, at first, Suspended may seem unwieldy, perhaps overwhelming ...all that documentation, ...six robots to control at once, ...what do *I* know about fixing computers, anyway?

Let your fears be calmed, the game is very playable, even replayable, once you understand the premise. The robots are easy to control, once you get to know them. And, you don't have to know anything about fixing real computers. So, get out the documentation, a pencil and plenty of paper, and boot-up the disk — people are dying and you're half asleep! — people are dying and you need to wake up! ■

levels for the Axis and the Allied commanders (expert, historical, intermediate, or novice); whether the game is solitaire or with two players; which scenario is being played; whether initiative is historical or random; and whether or not to include in the Axis force pool two optional depot units. The players are given the further option of setting the specific levels of both Axis and Allied combat points, air points, replacements, and reinforcements to values other than those automatically set by the computer(based upon the difficulty levels already determined for the two players). The level of Axis supply and the amount of time in the "display delay loop" may also be set at this time.

Having completed the set-up, the game now begins. The game itself is broken into four segments and the segments into phases, during each of which specific actions and reactions may take place. In the first segment, *mobilization,* players receive new units and supplies at their home bases, allocate supplies and replacement points to specific units, expend supply for maintenance, eliminate units with insufficient supply, and determine which player has initiative for the that turn. The player determined to have initiative has the option of moving his units first or being able to respond to the other players move by moving second.

During the second two segments, the *first* and *second player segments,* both players receive operational points for their units (which are expended to a varying degree during the two phases when the unit performs any action), and the phasing player begins his movement. If, during the phasing players movement, he should move adjacent to an enemy unit, then the non-phasing player may be eligible for limited reaction (no more than half of a unit's operational points may be expended in limited reactions). After the phasing player has moved all of the units which he desired to move and all limited reactions are completed, then units resupplied (if in supplied status) and depot units of the phasing player may move. When the phasing player has finished trying to catch up to his combat units with his depots, the enemy player is given the opportunity for a limited reaction which is followed by a repeating of the process in all manners, excepting that only the phasing player's units receive operational points for the second half of his turn.

The last segment, appropriately named the *finalization segment,* is when the victory points for the turn are determined and the level of victory assigned (if the last turn). The players receive victory points for causing casualties in enemy units, occupying towns, points for the distance which units are from their base, and automatic loss if a player's home base was in enemy hands at the end of the turn. As the last part of this segment, the players are given the option of saving the game.

Combat

The most complex and important aspect of this game is that of combat. To initiate combat, a unit must expend both supply and operational points dependent upon its type and nationality. The combat is also affected by a large number of other factors. Lack of supply will half the defender's defensive strength (if below 50 supply points). The terrain and level of fortification also plays a large roll in determining the final combat odds. Each type of terrain has an intrinsic modifier to the defenders combat strength which may be increased through digging-in (building fortifications) up to the point where it triples the defender's defense.

Air points may also be used by both the attacker and the defender. For the defender, each air point increases his total value for defense by 15%. For the attacker, this multiple is 20% per air point.

The final modifier to the combat odds are those caused by supporting units not themselves in the combat. The attacker adds 300 combat points per hex adjacent to the defender which is occupied by other of his units. The attacker also adds 100 combat points per non-participating units in his own hex. The attacker then subtracts 200 points for every enemy unit stacked in the target hex but not the subject of the attack and for every one in a hex adjacent to the defenders hex.

After the final combat odds have been calculated by the computer, it will then modify the losses for both sides based upon these odds and two other factors—the attacker's chosen *battle intensity* and the *risk factors* chosen by both sides. The attacker's battle intensity is determined, on a scale from 1 to 9, which modifies not only the relative number of losses on both sides, but also the amount of supplies expended by the attacker on that battle. The sum of the risk factors chosen by the attacker and defender, again on a scale of 1 to 9, determines the variability of the combat losses. With all of the modifying factors, it is obvious that this system would only be playable on a computer.

Comments and Conclusions

KD effectively demonstrates that the old problem of playability vs. realism can be largely eliminated by the use of thoughtful design and programming. The game captures the feel of the war in North Africa, is relatively easy to play, and yet contains accurate details of the units involved combined with a reasonably accurate method of calculating the effects of combat. When these features are combined with the many other features of the game which could not, in the limited scope of this article, be covered, it becomes obvious to any gamer of long standing that KD is another solid step towards the ideal computer wargame. ■

GALACTIC (Con)

Once you have accumulated enough cash (250,000 Frilbees) and have improved your flying skills to at least 8 or 9, I'd recommend buying a spaceship. You can then earn money much faster by flying cargo and passengers around the galaxy than you can in the streets. Incidentally, you may also run into some Gorsai pirates (who make great companions if you can defeat them) or find that your passengers may make a hijack attempt requiring a battle to be fought. One change from GG is that Gorsai don't change sides in the middle of a battle. So, once you can manage to recruit a couple of them, you'll have them along for awhile.

When you think you're ready, try applying to one of the *Guilds* for an adventure. You'll find that the Space Patrol, the Agency, the Adventurers Guild, or the Sensitive's Guild to be more than happy to send you out on a challenging and highly exciting adventure. One strong word of caution, however. Be sure to save your team on a disc before heading out on one of these, so that when you are ignominiously wiped out, you won't have to start over completely from scratch.

Combat, whether in the streets or on an adventure, is done with the same system as GG. The computer, however, is a tougher opponent than it used to be, and you'll often find a battle costing the lives of one or more of your very cherished companions. It is, therefore, very easy to understand why the single most highly prized treasure in all the galaxy is the K-Reanimator - a device which can bring the dead back to life. Your ability to use this magnificent, device is dependent on both sensitivity and luck, and if it fails, it will be ruined, so it's nice to carry as many of these as you can find.

As in many of SSI's games, you are offered the chance to create your own *scenarios*. This means that once you have successfully explored all the adventures given on the game disc or even before, you can create your own. The process of creating your own adventures is infinitely variable and, since you can tie one adventure on to another, you can keep going for a long, long time.

HINTS

Clone yourself immediately. You'll need all the help you can get as soon as possible. Try to avoid recruiting and training the weaker species. It's very frustrating to have nurtured a Cygnian all the way up to Level 15 in advanced skills and 18 or 19 in weapons skills, only to find that he's killed in the first round of combat. I found my greatest success when starting out with a Wodanite. Speed and dexterity are reasonably high, as are strength and endurance. Furthermore, they're able to use phasor rifles, which are deadlier than phasors, and can wear heavy or special armor. Zorcons and Dulbians are strong and have great endurance, but are so slow and have such lousy agility that they often never get into the battle at all.

As soon as possible, find and defeat a band of Gorsai, getting some of them to join you as they are deadly fighters; fast, agile, and very strong. Remember that you can have no more fighters than you have leadership, so that one of your current associates may have to be fired in order to make room for the Gorsai. This may be heart rending, but when you see how good the Gorsai are, you'll be glad that you did.

In the early stages, concentrate your skill-building on your original adventurer and the two clones. You'll lose many of the others along the way, and there's no reason to invest hard earned frilbees in building skills for those who may very well fall by the wayside.

Once you've got a group of seven or eight, consider trying one of the easier adventures (remember to save your team before leaving on your voyage!). Only on adventures or in battles fought over hijacks or cargo can you increase your *leadership*.

As soon as possible, get hold of a *missile imploder*. This one weapon will remove all guided weapons from the board in one fell swoop. The corrolary to this is "don't develop a strong guided missile weapons user of your own." The missile imploder is not selective and will eliminate your gemstones and gapers as well as the enemies.

Don't forget at RNA *tabs* can only be used to increase your skills to level 15, and that jobs completed in the streets can only boost your skill to level 10.

When you do go on an adventure, it's a good idea to make a map of the various adventure segments to help you get out. In at least one case, I spent nearly three weeks trying to find an exit from an adventure. I fought some forty battles and lost two very valuable fellow adventurers after my three K-Reanimators failed. I did finally get out, but only after making a map (which I should have done from the beginning).

One last option which gives a nice touch is to change from one-player to two-player mode in the middle of a combat. This allows you to have a friend join in the game if he or she happens to drop by while you're fighting a battle.

CONCLUSION

SSI has done a superb job on this sequel to GG. Most role playing games have a rather abstract combat resolution sequence. GA has a complete game within a game for combat resolution, along with as complicated a series of adventures as you could want. If you enjoyed Galactic Gladiators, Galactic Adventures is an absolute must. If you never saw GG, then treat yourself to a great game system and role playing fantasy, and go out and get this one. I got my copy the first week it was available, and I still haven't completed all the adventures that it offers. ■

SILICON (Con)

(1) Find the six hexes circling our present location.
(2) Eliminate any hex already in our current path or which we cannot otherwise move through.
(3) Of those remaining, pick the one closest to our goal. In case of a tie, use some arbitrary tie-breaker.
(4) Move to the hex selected.
(5) If we are in the goal hex, stop; otherwise, go to (1).

On an unobstructed map, we will immediately trace a minimal path to the goal hex. Figure 1b shows one such path. Here, we broke ties by picking the right-hand hex. Other paths would have been traced had we been using other tie-breakers (left-hand, alternating, random). In all, I count 14 different minimal paths from the starting hex to the goal hex.

As mentioned, this is a very simple case. In fact, with one hex numbering system I know of, the coordinates of the hexes in a minimal path can be directly computed by a simple algorithm. In such a case, we could get by (at least for path-tracing purposes) without the *distance* function at all. But Figure 1a represents a very simple case. Let's consider something more complex.

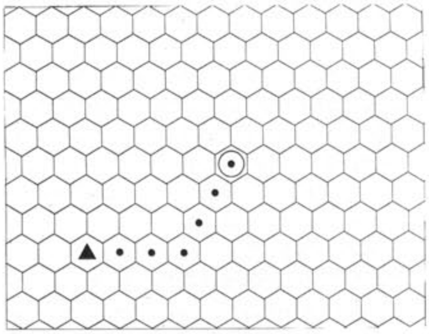


Figure 1b

Figure 2 adds three hexes near the goal with peaks in them. The peaks represent mountains, and our path cannot pass through any of these hexes. Our initial algorithm will still work, but we are no longer guaranteed of finding a minimal path. In fact, Figure 2 shows the path that would be traced if we tried the same approach as we did on Figure 1 (right-handed tie breaking). It has a length of 9, while the shortest path possible is only 7 hexes long.

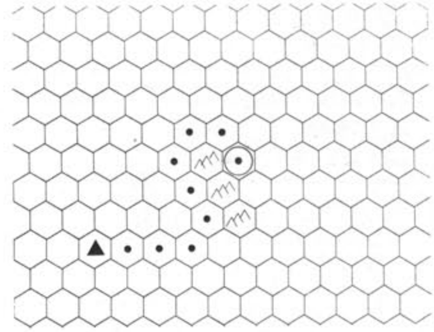


Figure 2

How do we make our program "smart" enough to find the shortest path? One solution is to find all "minimal" paths (i.e., all paths that can be generated by our algorithm) and then pick the shortest one. How do we do that? We shift from a *depth-first* to a *breath-first* approach. What does that mean? Tune in next issue and find out.

LEARNING (Con)

naughty dragon is keeping 16 nice animals prisoner in and around his (her?) house. Did somebody say house? Yes, this dragon lives in an average sort of two-level white house. Well, it *does* have an elevator, but apart from that it's average. Young children definitely relate better to exploring a house than they do a cave or dungeon and they seem to find the mixture of familiar and fantastical very amusing.

The object is to search for the 16 animals and free them. Occasionally, the dragon will appear, breathing colorful dragonfire. It doesn't attack, but it prevents you from releasing any animals while it is present.

DK is very well done and will help develop reading skills and decuctive reasoning in children in second grade or below. It is highly recommended. The same people have done TROLL'S TALE which has also been released by Sierra On-line.

The second game this month is ST2, second in a series by Spinnaker Software. ST2 is for older children, 10 years and up. The object is to solve a mystery by proving all of the suspects — save one! — are innocent. In this case, somebody has stolen a performing dolphin from the local aquarium.

The evidence comes in the form of clues, which must be referred to by number when making accusations. The clues come rapidly but are mostly worthless, but it is necessary to write them down since you can't tell which are important at the time. Here is the problem number one; the clues are only on the screen for about 15 seconds and there is no way to pause the game. Even I can't write fast enough to copy them down. You can always "find" the clue again — they're never lost — but this may take some time and effort.

Several other aspects try your patience as well. You can question the suspects in their homes, but only one question per visit, please! Since there are 3 possible questions you can ask, you must make 3 trips to each suspect. There are also 3 clues inside each house, but again you can only get one at a time. This takes quite a while since the suspects are often home and if you get caught snooping you are sent back to headquarters to cool your heels for a bit. Even 10-year-olds get tired of this.

This game would be much more fun if the pace were faster. As it is, it takes days to complete and you lose track of what leads you were following, what you were doing, even what facts you know. It may teach the value of keeping well-organized notes, but it doesn't do quite as well teaching deductive reasoning. It's too bad because it could have been very, very good.

TELE-GAMING (Cont.)

FRPGs. The Sanctuary is a beautifully designed, captivating system. You'll find it difficult to sign off once you've entered its main gates.

Sunrise Omega-80—(415) 452-0350: Perhaps the most detailed and articulate FRPG I've seen on any BBS is run by a Chaosium (FRP and board game manufacturer) play-tester, Karl Mauer, on San Francisco's Sunrise board. Riddles and puns abound in this game — the gamemaster and players have created a perfect fantasy world. Make yourself comfortable in the "Gamers' Corner," and share the fun!

Other Notables:

California:

Access One	(213) 537-3378
The Apple Board	(213) 944-5455
BBGS	(213) 699-0775
IF PMS	(714) 772-8868
The Interface	(213) 477-4605
Softworx	(213) 473-2754

Florida:

The Lynx	(305) 772-1076
The Oracle	(305) 475-9062
St. Pete BBS	(813) 866-9945

Illinois:

Warlock's Castle	(618) 345-6638

New Jersey:

Dry Dock BBS	(201) 992-2565
TrashCom BBS	(201) 226-0341

New York:

Adventure to Atlantis	(914) 359-1517

Texas:

Beach Game System	(904) 932-8271
Eclectric System	(214) 239-5842
Griffin's Lair	(214) 840-8294
The Mines of Moria	(713) 871-8577
Teledunjon III	(214) 960-7654

There are many more great BBSs around the country, of course, but this list is a fine starting point. In my next column, we'll investigate other types of tele-gaming BBSs — those which offer real-time, online games and/or computer games for downloading. Until then, light a torch, nock an arrow, and embark, ever so cautiously, on your message board quest. ■

Scorpia (Cont.)

fused quite easily. There are two rooms in here that you must visit; the one with the door is the one you should come to last. There are also two items to be found in the maze, but you only need one of them (hint: when you reach the room with the door, you should have six stones). By the way, this maze also has a little trap in it: make a right at the tsampa.

Ok, you're almost there! Open the door (a little experimentation should do it), and you will be in a room with a pool....and a jade claw sticking up from the pool holding the Serpent's Star (if you DON'T see that, you haven't done something: go back into the maze until you find the other room). But don't try to get it yet! First, make a little music. Aha! The dragon appears.... and he won't think very much of you, either. He's got a couple of riddles for you, too...and again, you will only have one chance to answer them. But once you do, the Serpent's Star is yours! Of course, there' still the little matter of getting out of the monastery, but the Star will help you there, if you know what to do with it (read the room description very carefully). After that, you can come back here, hoist a few, and brag about your success!

Now, while you're pondering that, I'll just make the rounds and see what the regulars need.....

Haphazard Hints: **ZORK II**—Don't waste time on the rose, flask and grue repellent; they aren't useful at all. *DARK CRYSTAL*—The same can be said for the sling and the pouch, you don't need them. *ULYSSES*—You need the gold coin to get the map, but not from the shopkeeper. **WIZARD & THE PRINCESS**—There are two ways to get to the treehouse; the easy way is the wrong one. **MYSTERY FUN HOUSE**—The fortune-telling machine is really broken, but it's the sign that's important. Think about it.

And now, the hints to Serpent's Star in slip code:

Monk's riddles:
1) ESBHPO
2) ZJO BOE ZBOH
3) NBO
Dragon's riddles:
1) SBJOCPX
2) OJSWBOB

Well, looks like it's closing time, folks. See you next issue, when the feature adventure will be: Zork III (I'm going backwards just to be perverse). In the meantime, if you need help with an adventure game, there are three ways you can reach me: 1) Send a self-addressed, stamped envelope to: Scorpia 1319 Second Ave, Suite 540 NY,NY 10021; 2) On the Source: ST1030; 3) On Compuserve, Go GAM-310, or EMAIL 70001,1263.

Happy adventuring! ■

Reader Input Device

RID #8

There were 212 R.I.D.s turned in by press time for this issue. The breakdown of users was: Apple (53%); Atari (43%); Others (4%). Newly rated games and updated games are listed with **bold type** in the table on page 52.

GAME RATING

The table on page 52 includes games evaluated by our readers. For a game to be included in this listing it must first have been offered for rating in our regular RID rating system. Games offered for evaluation are those covered in the magazine and/or those having a good sales record during the time of evaluation. Once offered for evaluation, the game must have been evaluated by a sufficient number of readers to be included in the results. Any game not evaluated by at least 10% of the respondents was not included in the results.

Games were rated on a scale of 1 (terrible) to 9 (outstanding). Respondents were asked to consider such things as PRESENTATION (graphics, sound, packaging, documentation); GAME DESIGN (design, playability, interesting?); LIFE (does the game wear well?)

R.I.D. #9 (Use card provided)

Use boxes #1 and #2 to record reader survey answers from INSIDE THE INDUSTRY. See page 4 for instructions.

On this page a number of games and articles are listed for evaluation. Please take time to evaluate these games and articles. Use the guidelines above for game evaluation. Leave blank any game which you have not played enough to have formed an opinion.

Please rate articles on the basis of the article itself, not your opinion of the game being reviewed. Enter a zero for any article that does not interest you.

GAMES

1. Part I (p.4)
2. Part II (p.4)
3. Wizardry (Sir-tech)
4. Suspended (Infocom)
5. Bomb Alley (SSI)
6. Knight of Diamonds (Sir-tech)
7. Miner 2049er (MicroFun)
8. Chess 7.0 (Odesta)
9. Guadalcanal Campaign (SSI)
10. Computer Ambush 2ed. (SSI)
11. Ultima II (Sierra On-Line)
12. Pinball Construction (Elec. Arts)
13. Galactic Adventures (SSI)
14. M.U.L.E. (Electronic Arts)
15. Archon (Electronic Arts)
16. Knights of the Desert (SSI)
17. Clipper (PDI)
18. Caverns of Freitag (Muse)
19. Kid Grid (Tronix)
20. TAC (Avalon Hill)
21. Fore! (Epyx)
22. Championship Golf (Hayden)
23. Golf Challenge (Sierra On-line)
24. Hi-res Comp. Golf2 (Avant-Garde)

ARTICLES

25. Chip & Ferb Cartoons
26. Suspended Review
27. M.U.L.E. Review
28. Normandy Strategy & Tactics
29. Scorpion's Tale
30. Knights of the Desert Review
31. Galactic Adventures
32. Tele-gaming
33. Real World Gaming
34. Atari Arena
35. Computer Golf!
36. Bomb Alley Review
37. Name of the Game
38. Silicon Cerebrum
39. Learning Game
40. Commodore Key
41. What computer do you own?
   1=Apple; 2=Atari; 3=C-64;
   4=Vic-20; 5=IBM-PC 6=TRS-80
   7=Other (please specify)

Miscellaneous

A. There are three broad catagories into which most computer games fall (strategy, adventure, arcade). Which of the three is your favorite? Why?

B. Other comments

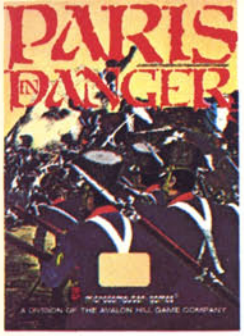
Reader Input Device

R.I.D. was prepared with the help of SPEED STAT by SoftCorp International, Westerville, OH 800-543-1350

See page 51 for details on the Reader Input Device

Game Ratings

8.09	Wizardry	Sir-tech	Apple
7.73	**Suspended**	**Infocom**	**Many**
7.65	Bomb Alley	SSI	Apple
7.60	Knight of Diamonds	Sir-tech	Apple
7.45	Miner 2049er	Micro Fun	Apple
7.44	**Chess 7.0**	**Odesta**	**Many**
7.34	Guadalcanal Campaign	SSI	Apple
7.32	**Computer Ambush (2ed)**	**SSI**	**Apple**
7.32	Ultima II	Sierra On-Line	Apple
7.29	Pinball Construction	Budge Co.	Apple
7.27	Galactic Adventures	SSI	Apple
7.25	**Survivor**	**Synapse**	**Atari**
7.22	**Jumpman**	**Epyx**	**Atari**
7.20	Zork Series	Infocom	Many
7.05	Cosmic Balance, The	SSI	Apple, Atari
7.03	Eastern Front	APX	Atari
7.03	Choplifter!	Broderbund	Apple, Atari
7.00	Computer Baseball	SSI	Apple
6.98	Southern Command	SSI	Apple
6.97	Olympic Decathlon	Microsoft	Apple
6.94	Shattered Alliance	SSI	Apple, Atari
6.93	Galactic Gladiators	SSI	Apple, Atari
6.93	Legionnaire	Avalon Hill	Atari
6.93	Star Blazer	Broderbund	Apple
6.92	Starcross	Infocom	Many
6.91	Deadline	Infocom	Many
6.91	Warp Factor, The	SSI	Apple, IBM PC
6.91	Castle Wolfenstein	Muse	Apple
6.89	**Necromancer**	**Synapse**	**Atari**
6.88	Cartels & Cutthroats	SSI	Apple
6.87	Crisis Mountain	Synergistic	Apple
6.86	Pursuit of the Graf Spee	SSI	Apple
6.84	Normandy	SSI	Apple, Atari
6.82	Cytron Masters	SSI	Apple, Atari
6.82	Germany 1985	SSI	Apple
6.76	Rendezvous	Edu-Ware	Apple
6.76	Shamus	Synapse	Atari
6.75	President Elect	SSI	Apple
6.73	Star Maze	Sir-tech	Apple
6.71	Dnieper River Line	Avalon Hill	Many
6.67	Computer Gin Rummy	Datamost	Apple
6.66	**Astro Chase**	**First Star**	**Atari**
6.66	Napoleon's Campaigns	SSI	Apple
6.65	Escape from Rungistan	Sirius	Apple
6.61	Casino	Datamost	Apple
6.60	**Ali Baba/40 Thieves**	**Quality**	**Apple, Atari**
6.56	David's Midnight Magic	Broderbund	Apple, Atari
6.54	Ultima I	Cal Pacific	Apple
6.53	Starship Commander	Voyager	Apple
6.50	**Sherwood Forest**	**Phoenix**	**Apple**
6.47	Epidemic	SSI	IBM PC
6.40	Adventure to Atlantis	Synergistic	Apple
6.40	Tigers in the Snow	SSI	Many
6.39	**Galactic Attack**	**Sir-tech**	**Apple**
6.32	Raster Blaster	Budge Co.	Apple, IBM PC
6.28	Temple of Apshai	Epyx	Many
6.27	Mask of Sun	Ultra Soft	Apple
6.27	Ulysseys	Sierra On-Line	Apple, IBM PC
6.26	Swashbuckler	Datamost	Apple
6.21	Crush, Crumble Chomp!	Epyx	Many
6.20	**Zaxxon**	**Datasoft**	**Many**
6.17	Frogger	Sierra On-Line	Apple, Atari
6.16	A2-PB1 Pinball	SubLogic	Apple
6.15	Cannonball Blitz	Sierra On-Line	Apple
6.11	A2-FS1 Flight Simulator	SubLogic	Apple,TRS-80
6.07	**Old Ironsides**	**Xerox**	**Apple**
6.04	Odyssey	Synergistic	Apple
6.04	Robotwar	Muse	Apple
6.02	Way Out	Sirius	Apple, Atari
6.00	Bug Attack	Cavalier	Apple
6.00	Empire of Overmind	Avalon Hill	Many
6.00	**Spy's Demise**	**Penguin**	**Apple**
5.99	Swordthrust Series	CE Software	Apple
5.98	Protector II	Synapse	Atari
5.94	Labyrinth	Broderbund	Apple
5.92	Time Zone	Sierra On-Line	Apple
5.87	Marauder	Sierra On-Line	Apple, Atari
5.84	**Close Assault**	**Avalon Hill**	**Many**
5.83	Hi-Res Computer Golf	Avant-Garde	Apple
5.79	A.E.	Broderund	Apple
5.79	Aztec	Datamost	Apple
5.79	S.E.U.I.S.	SSI	Apple, Atari
5.77	Snack Attack	Datamost	Apple
5.77	Torpedo Fire	SSI	Apple
5.76	Arcade Machine, The	Broderbund	Apple
5.74	Chicken	Synapse	Atari
5.71	Sea Fox	Broderbund	Apple
5.70	Serpentine	Broderbund	Apple
5.68	Andromeda Conquest	Avalon Hill	Many
5.67	**Blade of Blackpoole**	**Sirius**	**Apple, Atari**
5.67	**The Missing Ring**	**Datamost**	**Apple**
5.65	Invasion Orion	Epyx	Many
5.64	Prisoner 2	Edu-Ware	Apple
5.60	Falcons	Piccadilly	Apple
5.56	Guns of Fort Defiance,	Avalon Hill	Many
5.53	Bez-MX	Bez	Apple
5.49	Kabul Spy	Sirius	Apple
5.47	**Alien**	**Avalon Hill**	**Many**
5.47	**Apple Panic**	**Broderbund**	**Many**
5.38	Dawn Patrol	TSR	Apple
5.33	Controller	Avalon Hill	Atari
5.30	Sea Dragon	Adventure Int.	Apple, Atari
5.27	Picnic Paranoia	Synapse	Atari
5.23	Attack on EP-CYG-4	Bram	Atari
5.23	King Arthur's Heir	Epyx	Atari
5.11	Conglomerates Collide	Rockroy	Apple
5.04	Firebug	Muse	Apple
5.04	Escape Vulcan's Isle	Epyx	Atari
5.03	Galaxy	Avalon Hill	Many
4.91	Major League Baseball	Avalon Hill	Many
4.90	**Nautilus**	**Synapse**	**Atari**
4.88	**Wizplus**	**Datamost**	**Apple**
4.87	Claim Jumper	Synapse	Atari
4.83	Tanktics	Avalon Hill	Many
4.75	**Pie-Man**	**Penguin**	**Apple**
4.69	Empire I	Edu-Ware	Apple
4.69	Frazzle	Muse	Apple
4.63	**Twerps**	**Sirius**	**Apple, Atari**
4.61	Fore!	Epyx	Apple
4.57	Crypt of the Undead	Epyx	Atari
4.53	Dungeon	TSR	Apple
3.75	B-1 Nuclear Bomber	Avalon Hill	Many



Paris In Danger

A simulation of Napoleon's 1814 campaign in France. One of Napoleon's finest, against the invading Allied Armies. (Austrian, Prussian and Russian). You can choose to take the role as Napoleon, Commander Schwarzenberg, or play both sides to re-create the actual campaign. PARIS IN DANGER is unique, in that it allows the players to compete on both the strategic and tactical levels, on a full-color scrolling map of France and surrounding countries.

	With Cassette For:							With Diskette For:			
GAME NO.	TRS-80 I&III	APPLE II,II+ IIe	CBM PET 64*	COM. 64	ATARI 4/800 1200XL	TRS 80 Color	VIC 20	TRS-80 I&III	APPLE II,II+ IIe+	ATARI 4/800 1200XL	IBM PC
44753										48K	



S.C.I.M.M.A.R.'S

(Surface Contra-Gravity Individual Manned Mobile Anti-Vehicle Raiders) . . .

A game of gladiatorial armor combat in the far future. Heroes drive personal combat vehicles more akin to modern jets than tanks, with immense speed and acceleration. It is combat of maneuver, reflex and quick thought, where only the best survive.

	With Cassette For:							With Diskette For:			
GAME NO.	TRS-80 I&III	APPLE II,II+ IIe	CBM PET 64*	COM. 64	ATARI 4/800 1200XL	TRS 80 Color	VIC 20	TRS-80 I&III	APPLE II,II+ IIe+	ATARI 4/800 1200XL	IBM PC
44552									48K		



T.G.I.F. (Thank Goodness It's Friday!)

Welcome to T.G.I.F., a fun party game (1 to 4 players) re-creating a typical week in the lives of the working class. MONDAY comes hard with bills due. TUESDAY is lottery day; buy 3 tickets, if you feel lucky. WEDNESDAY (hump day) may bring you windfall profits, or go out like a bump. THURSDAY is investment day, tempting you with boats, timber rights, and land; do you dare take the chance? FRIDAY comes, T.G.I.F., and that means PAYDAY. SATURDAY brings a treasure hunt worth digging for. SUNDAY is the day of rest, but is that what happens?

	With Cassette For:							With Diskette For:			
GAME NO.	TRS-80 I&III	APPLE II,II+ IIe	CBM PET 64*	COM. 64	ATARI 4/800 1200XL	TRS 80 Color	VIC 20	TRS-80 I&III	APPLE II,II+ IIe+	ATARI 4/800 1200XL	IBM PC
45701				64K	40K						
45753										40K	



Fortress of the Witch King

Enter the Fortress of the Witch King, realm of a dark and mysterious lord, whose slightest whim gives you great treasures or plunges you into deadly combat with the vicious hacker. Your quest is to find the arch ruler and slay him, thus gaining the orb, scepter and crown, and releasing the land from his thrall. But beware, there are conditions to be met and battles to be fought. Your small band of scouts and warriors will be in constant danger, for there are others who will not hesitate to raid and steal, seeking the same rewards. So if you are ready, come . . . the WITCH KING waits!

	With Cassette For:							With Diskette For:			
GAME NO.	TRS-80 I&III	APPLE II,II+ IIe	CBM PET 64*	COM. 64	ATARI 4/800 1200XL	TRS 80 Color	VIC 20	TRS-80 I&III	APPLE II,II+ IIe+	ATARI 4/800 1200XL	IBM PC
46152									48K		



Parthian Kings

Feudal civil war is coming, and many nobles are declaring themselves king of Parthia. The whole situation is wide open for a brillant commander, a great strategist, and a leader of men, for YOU!!! A 1 to 4 player game, in which you create, buy and command your own army, and use a great wizard, to do your bidding and casting of terrible spells on your enemies. A brilliant world of pageantry and conquest awaits you with PARTHIAN KINGS.

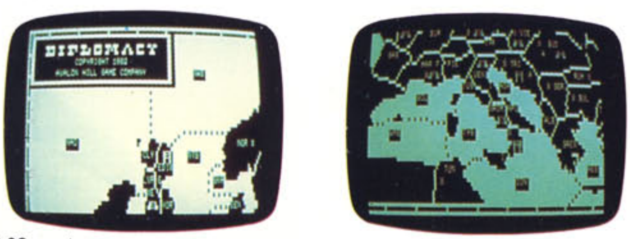
	With Cassette For:							With Diskette For:			
GAME NO.	TRS-80 I&III	APPLE II,II+ IIe	CBM PET 64*	COM. 64	ATARI 4/800 1200XL	TRS 80 Color	VIC 20	TRS-80 I&III	APPLE II,II+ IIe+	ATARI 4/800 1200XL	IBM PC
45652									48K		



T.A.C.

An acronym for Tactical Armor Command. Avalon Hill's Microcomputer Game of Armored Combat during World War II. You control individual tanks, anti-tank guns, and infantry squads. For one or two players featuring outstanding Hi-Resolution graphics, enhanced sound, and stimulating challenge. Five different scenarios are available from Meeting Engagement, Rear Guard, and Static Defense, to Breakout and Stalemate. The players control up to eight vehicles, guns and squads simultaneously, utilizing the equipment of either the German, British, Russian or American forces. A simulation for the most demanding wargamers. Atari, Commodore, IBM versions available later this summer.

	With Cassette For:							With Diskette For:			
GAME NO.	TRS-80 I&III	APPLE II,II+ IIe	CBM PET 64*	COM. 64	ATARI 4/800 1200XL	TRS 80 Color	VIC 20	TRS-80 I&III	APPLE II,II+ IIe+	ATARI 4/800 1200XL	IBM PC
46052									48K		

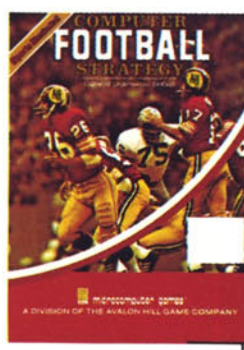


TRS-80 version

Computer Diplomacy

A computer simulation of Avalon Hill's classic board game of the same name. It's the turn of the century, and the world is preparing for WWI. A solitaire or multi-player game in which each player controls one of the major powers—Germany, Austria, Hungary, Turkey, Russia, Italy, England and France. The goal is to spread your influence and control over other territories, with diverse methods, from diplomacy and political strategies, to back-stabbing and psychological intimidation.

	With Cassette For:							With Diskette For:			
GAME NO.	TRS-80 I&III	APPLE II,II+ IIe	CBM PET 64*	COM. 64	ATARI 4/800 1200XL	TRS 80 Color	VIC 20	TRS-80 I&III	APPLE II,II+ IIe+	ATARI 4/800 1200XL	IBM PC
43051								48K			



Computer Football Strategy

The action is animated, on a large scrolling football field; watch the quarterback drop back to pass, and as the defensive players move on the intended receiver. You have offensive and defensive formations to choose from, as a detailed time clock ticks away. This is truly Football's Best.

	With Cassette For:							With Diskette For:			
GAME NO.	TRS-80 I&III	APPLE II,II+ IIe	CBM PET 64*	COM. 64	ATARI 4/800 1200XL	TRS 80 Color	VIC 20	TRS-80 I&III	APPLE II,II+ IIe+	ATARI 4/800 1200XL	IBM PC
41501				64K	32K						
41551								32K			
41553										32K	
41554											64K

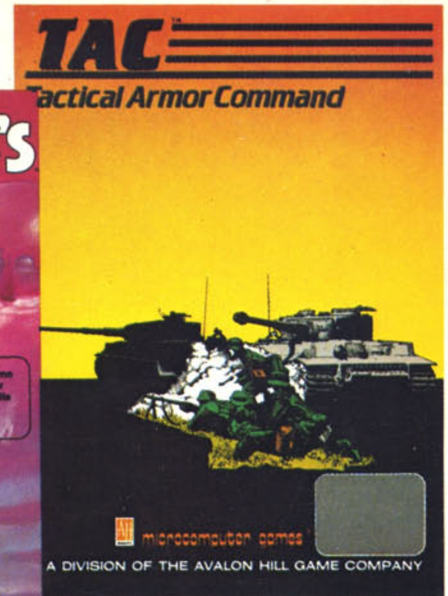
AH QUALITY

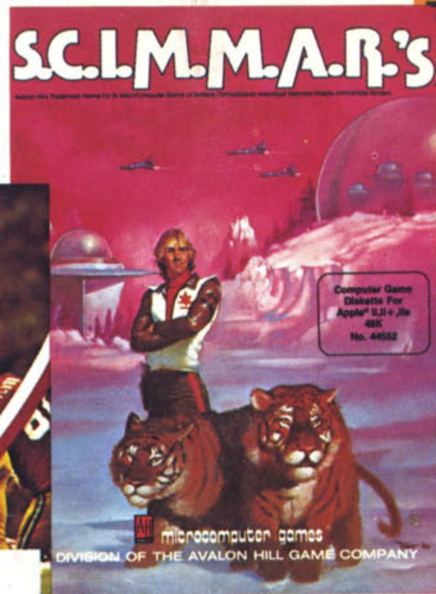
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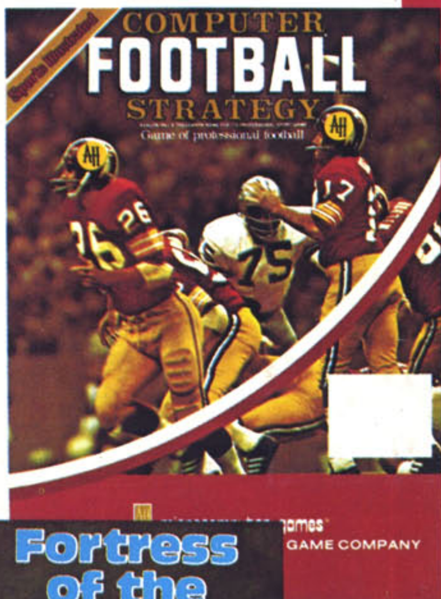
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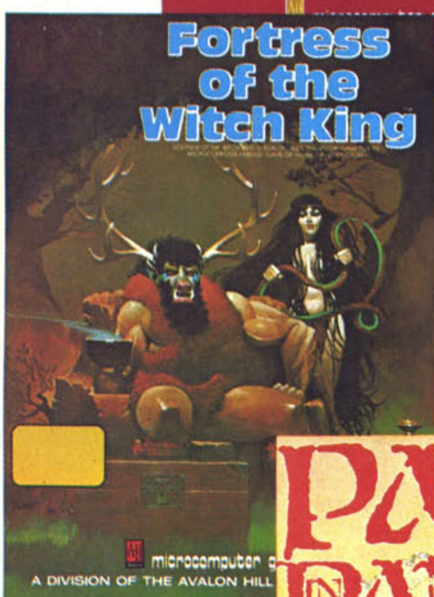
30M X-4066 6/83

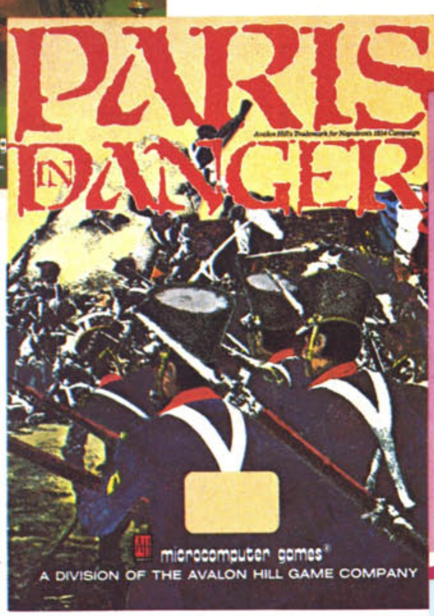
NEW for SUMMER of '83!

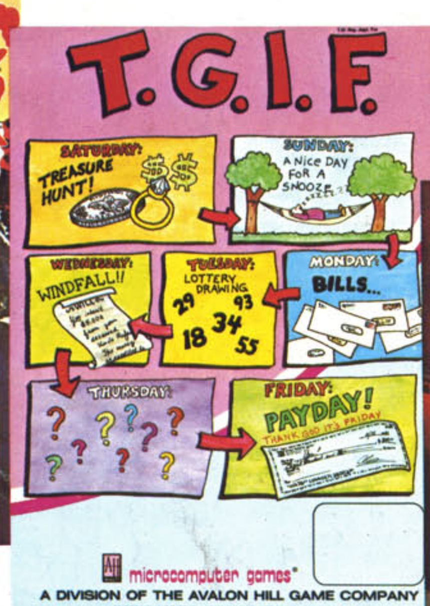




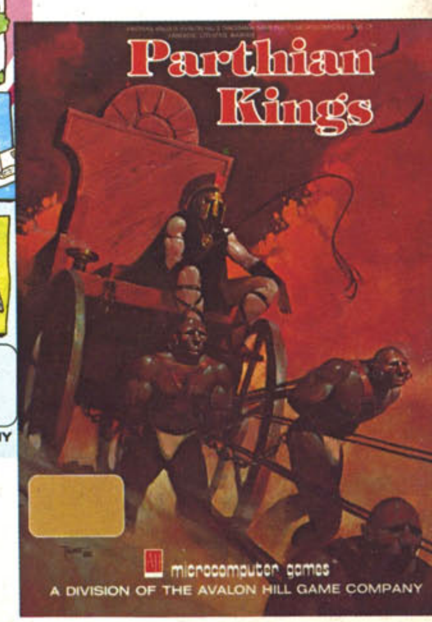








Strategy, Science Fiction, Fantasy, Adventure, Education, Sports & Arcade GAMES for the HOME COMPUTER



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